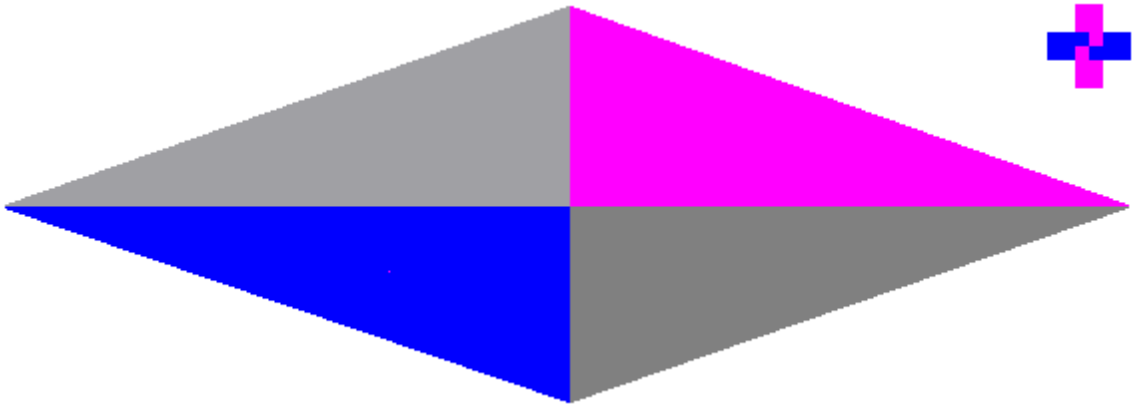

Chart Overlay

User's Manual

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1 Getting Started

ChartOverlay is an unusual program. The information in this section will give you an overview of how it works and help you make the most of its features.

ChartOverlay has a transparent window that you actually place on top of another window. When you do this, you can see the second window through the overlay and you can draw on the overlay based on what you see underneath.

ChartOverlay works with pretty much any other Windows program that displays charts (we haven't yet found a program that does not work). This means you can use it with Real Time or End of Day charting programs, web browsers, spreadsheets, even PDF files and eMail.

FibOverlay is the more basic of the two. As its name suggests, it allows you to add a Fibonacci Retracement capability to any price chart. It only does retracements and it only does one at a time; it's very basic.

ChartOverlay does all that FibOverlay does and much more. With it, you can draw Fibonacci Retracements and Extensions, Andrews Pitchforks, Gann Fans, Action-Reaction Lines Time Cycles and other studies. You can drawn them on any chart and you can draw as many as you want of each. You can also save your work, either as an image or as a file that can be opened later and used again.

1.1 Introduction

ChartOverlay provides you with a transparent (or translucent) window through which you can view a chart displayed by another program and upon which you can draw various studies that interest you.

You can use ChartOverlay to add any of several Studies to any chart that can be viewed with Windows®. ChartOverlay is an overlay. You simply place it over the chart you wish to study and you apply the Studies you want by drawing lines on the overlay or by clicking significant points.

Because neither the overlay nor the underlying chart program is aware of the other, you can use ChartOverlay anywhere. You can use ChartOverlay with end-of-day or real-time charting programs, web browsers, spreadsheets, PDF files, newsletters and the like.

Among the Significant Features Are:

- Studies
  - Trendlines
  - Speed Resistance Lines
  - Gann Fans
  - Parallel Trendlines
  - Action/Reaction Lines
  - Fibonacci Price Retracements
  - Fibonacci Fans
  - Fibonacci Arcs

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  - Fibonacci Time Extensions
  - Fibonacci Price Extensions
  - Andrews' Pitchforks [Standard, Modified Schiff, Original Schiff, Inside (or Reverse)]
  - Time Cycles
  - Text
- Copy or Save an image of your chart with the studies you added; Copy your image to the Clipboard or Save it to a file
- Save your work to a document and return to it later; this allows you to work with several charts if you wish
- Dynamically modify anything you have drawn
- Remove unwanted lines from some objects
- Adjust your studies to compensate for changes in the underlying chart, such an new bars or a different scale
- Arithmetic or Logarithmic scale
- Different number formats (both 1.618 and 1,618 are supported depending on how you have set your Regional and Language Options)
- Display price corresponding to cursor position
- Check for updates

ChartOverlay supports Windows® 7, Vista and XP. You are welcome to try it on earlier systems (2000, ME, 98, 95 and NT 4.0), but some limitations apply to systems earlier than XP and 2000 (dynamic mode, file formats).

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TCNet® is a trademark of Worden Bros Inc.
MetaStock® is a trademark of Equis International.

1.2 Examples

The following examples were created using TCNet® and StockCharts.com® as the background charting programs.

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The first example shows the use of some of the Fibonacci Studies (see Fibonacci Price Retracements, Fibonacci Arcs, Fibonacci Fans and Fibonacci Time Extensions). While this example looks a bit crowded at first, it shows how two sets of Fibonacci studies can complement each other. Note how the price follows the yellow .618 fan line in mid 2002 while the .5 magenta fan line follows along just below the prices. Note too how price plunges where the .5 magenta fan line crosses the .5 yellow arc and the .5 yellow time extension line. The .5 yellow and .382 Retracement levels also run through this area. Price plunges again when the .618 magenta fan line crosses the .382 magenta arc, the .5 magenta Retracement line and the .618 time extension line. Note also how price holds briefly at the .382 magenta arc, which is supported by the .618 yellow arc. Note that if we used a slightly later pivot as the start of the magenta move, the magenta and yellow arcs would have reinforced each other more strongly (you can confirm this by using ChartOverlay on this image to perform the alternate analysis).

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The second example was contributed by kmack, a TCNet® user. It shows how you might use Action/Reaction Lines (the blue dotted lines perpendicular to the solid green lines) with an Andrews' Pitchfork (the solid green lines). Note how price reacts to or follows the Action/Reaction Lines. Note also how price reacts when it encounters an intersection and how it follows the green Median lines.

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The third example shows two overlapping Pitchforks. The solid green Pitchfork is a normal one. The dotted green Pitchfork is obtained by moving the initial pivot down half the vertical distance between the first two pivots. Doing this creates additional lines and intersections that appear to mark significant changes in the behavior of Price. (This study was actually first drawn two bars earlier; it had to be redrawn for editorial reasons.)

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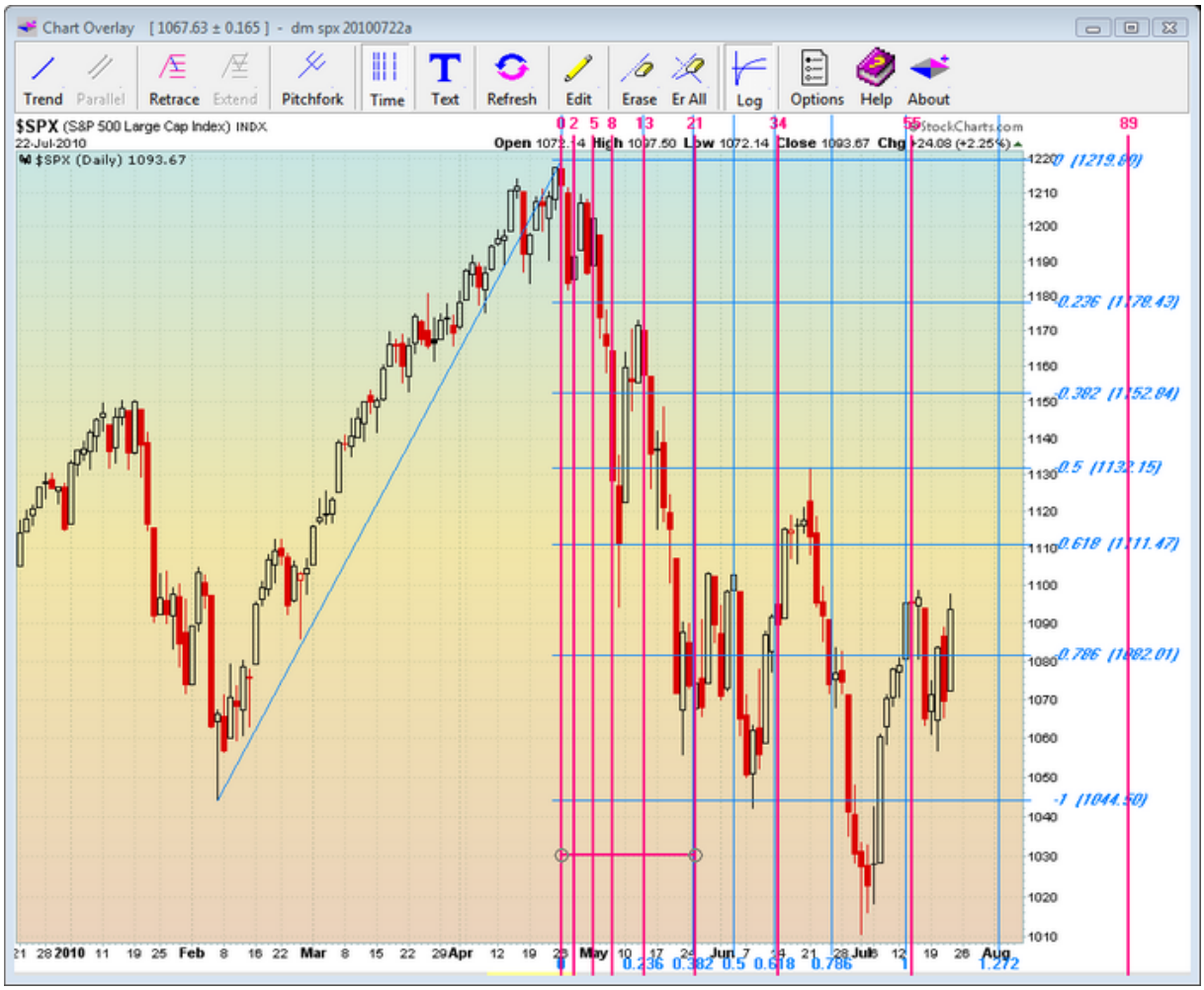
The fourth example was contributed by Don McCullar from Denton, Texas, who used StockCharts.com®. It illustrates the use of Fibonacci Time Cycles (magenta) in conjunction with a Fibonacci Retracement (blue) and Fibonacci Time Extension (blue). Note how the Fibonacci Time Cycles often coincide with reversals in the price chart. Note, too, how the 21, 34 and 55 lines coincide with the 0.382, 0.618 and 1 lines.



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StockCharts.com® is a trademark of StockCharts.com, Inc.

1.3 Glossary of Terms

When reading any sort of technical documentation, it is a very good idea to understand how important words are being used. Regardless of whether the usage of certain words is entirely correct, knowing *how* they *are* used will benefit your understanding.

The following terms are used with specific meaning in this Help file and other documentation. If you encounter a term that is unfamiliar or whose usage is potentially unclear, check here for clarification. If you encounter a confusing term and do not find it here, please let us know at support@omniumsoftware.com so we can add it. If you think we have chosen poorly, let us know that

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also.

Title Bar - The top-most part of the Window, so named because it normally contains the window's title. For example, the title of this window is ***Chart Overlay Help***. When ChartOverlay is started, the title bar will say ***Chart Overlay - Untitled***. If you save your work or open a file, the word ***Untitled*** will be replaced by the file name. The Title Bar is also used to show additional information that depends on the type of object you have drawn and selected.

Window - For our purposes, a rectangular area on a computer screen within which an Application can display and accept information. Common types of windows are Document Windows, Dialog Windows (or Dialog Boxes) and Message Windows (or Boxes). A Window normally has a Title Bar at the top and a larger content area beneath, which is surrounded by a border. While it is true that more complex window styles are possible, they are not relevant to ChartOverlay.

Menu - A list of commands that appears when you click the mouse. In many programs (but not ChartOverlay), there is a Menu Bar just below the Title Bar. In ChartOverlay, you access the menu by right-clicking in the **Drawing Area**.

Toolbar - A horizontal set of buttons that appears just below the Title Bar. Each button represents a command. The buttons on the left are called **Drawing Buttons** and each of them selects one of the **Drawing Tools**. If you wish, you can hide the toolbar.

Tool Button - Any one of the buttons on the **Toolbar**. Clicking on a **Tool Button** causes some action to be taken (unless the button has been disabled because it is not currently relevant; for example, when nothing has been drawn, the Erase button is disabled). Some **Tool Buttons** remain depressed until you click them again or until you click another button.

Drawing Button - Any one of the seven left-most buttons on the **Toolbar**. Clicking any enabled button selects the corresponding Drawing Tool and deselects any other that may have been selected. At your option, clicking a **Drawing Button** will also open a **Dialog Window** that lets you choose options associated with its drawing tool. In some cases, a **Drawing Button** may support more than one **Study** and

Dialog Window (or Box) - Any ChartOverlay window other than the main Overlay window.

Drawing Area - The area inside the borders of the Overlay window and below the toolbar.

Item - *Item* is often used as a synonym for *object*. Sometimes it is used as a generic pronoun to refer to a component of an object (eg, an Andrews Warning Line or a Retracement level); this should be clear from context.

Object - An Object is anything you draw with one of the tools, such as a Fibonacci Retracement, an Andrews Pitchfork, or a bit of text.

Selected Item or Object - The object whose defining points are indicated by small circles. When an item is first drawn, it is selected automatically. You can also select an item by ctrl-clicking on it. Simply pointing at an object will select it temporarily. When you ctrl-click or point at a point that is common to two objects, the one drawn later is selected.

Study - any of the technical analysis tools provided by ChartOverlay or any of the results of applying those tools. All of the tools provided by ChartOverlay are **Visual Tools** (eg, Trendlines, Gann Fans, Fibonacci Retracements) as opposed to **Numerical Tools** (eg, Moving Averages, Bollinger Bands, Linear Regressions). Although, the tools we offer may do some calculations, they are primarily based on drawing; any calculations done are based on a small amount of numerical information that you provide or on points or lines you may specify, not on the data used to plot any specific chart.

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1.4 Don't Overlook...

There are several useful features of ChartOverlay that might escape your notice. Here are a few:

- by selecting **Always On Top** **(Options: General)** you can keep the overlay on top of your charting program even while you are working with the charting program
- the **Hot Key** **(Options: Hot Key)** allows you to temporarily Hide and then Restore ChartOverlay; this is useful when you have it Always On Top but want it out of the way for awhile; by default the Hot Key is (ctrl-alt-F) but you can change it in the Options dialog
- if you have drawn a Fibonacci Retracement and it is now selected, the **title bar will display the current cursor position as a (time, price) Retracement or Extension** of the movement represented by the selected object (where <-1, -1> is the beginning and <0, 0> is the end of the move); in other words, **for any point on your chart, you can immediately see how much of a Retracement or Extension it would be simply by pointing at it**
- you can **hide the text on the toolbar** **(Options: Toolbar)** to make it smaller
- you can **hide the toolbar** **(Options: Toolbar)** altogether and use the menu instead
- you can **save** what you're working on and **open** it later; this is helpful when you're working on more than one symbol or timeframe
- you can **save an image** of your analysis and share it with others (the overlay and the underlying chart are blended)
- if you accidentally erase everything, you can undo it
- both **logarithmic** and **arithmetic** **scaling** are available; logarithmic requires that you enter price information
- if any object you have drawn contains price information, that information is available to other objects
- after you've drawn an object, you can still **change** its **properties**
- you can **change** the **shape** of the objects you have drawn
- you can **change** the **position** of the objects you have drawn (individually or as a group)
- you can specify individually the color(s) of the objects you draw or **you can have colors you choose assigned automatically** **(Options: Colors)**
- in some cases (eg, Action/Reaction Lines, Andrews' Pitchforks), **you can move some of the secondary lines** that are drawn; this allows additional fine-tuning of what you have drawn

1.5 How can ChartOverlay help?

There are two broad areas where ChartOverlay can help you in your trading:

- ChartOverlay adds several **Studies** that might not be available in your favorite program and it provides many options for these Studies
- You can use ChartOverlay in **places** where you might not otherwise have access to these Studies

1.5.1 Studies

ChartOverlay supports the following **Studies**:

- Trendlines
- Speed Resistance Lines

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- Gann Fans
- Parallel Trendlines
- Action/Reaction Lines
- Fibonacci Price Retracements
- Fibonacci Fans
- Fibonacci Arcs
- Fibonacci Time Extensions
- Fibonacci Price Extensions
- Andrews' Pitchforks
- Time Cycles
- Text

1.5.2 Places where you can use ChartOverlay

Because ChartOverlay is an overlay and can be used everywhere, it can be used in many hard to reach places:

- charting programs that don't have certain Studies
- published newsletters that are fixed and can't be modified
- Indicator windows in programs like TCNet® or MetaStock®
- charts shared by other users (as in TCNet®)
- notes created by you or other users (such as found in TCNet®).

1.6 Key features

Certain properties of ChartOverlay apply throughout the program. These include:

- how ChartOverlay updates what you see in the background
- how you see through the overlay
- how you can change the way the program works
- use of abbreviated dialogs
- saving your results
- changing what you have drawn

1.6.1 Getting Help

At any time you can make this Help file appear by doing any of the following:

- Clicking the **Help** button on the toolbar
- Choosing **Help** from the menu
- Pressing the **F1** key

You can also obtain a **hint** (or a **tip**) simply **by pointing at** a toolbar button or an option in a dialog box. Try this when you are in doubt about what something does and let us know if we can make these hints more useful.

1.6.2 Dynamic vs. Static

For newer versions of **Windows®** (**Windows® 2000** and later) changes to the background window appear immediately. This is possible because the newer versions of Windows® support this capability directly. This mode of operation is called **dynamic** mode. See **Options: Visibility**.

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For **earlier versions of Windows®**, a **static** mode is provided. In this mode, the background is refreshed when you make certain changes (such as moving the overlay or changing its size, or editing or erasing an object, or changing certain options). You can force an update at any time (such as when you change symbols or time frames or when new data is added to your chart). To force an update, simply press the Refresh button (or select Refresh from the menu).

ChartOverlay automatically determines whether or not dynamic mode is supported when it starts up.

Because dynamic mode requires the system to do more work, some users may experience slow operation (such as a sticky cursor) while in dynamic mode. Although this is rare, should you encounter it, you might want to try:

- using translucency with translucent lines, or
- using static mode.

1.6.3 Transparent vs. Translucent

ChartOverlay supports both transparent and translucent modes. See **Options: Visibility**.

In **transparent** mode, the overlay is like clear glass. You can see the background clearly and the objects you draw look pretty much like the indicators and studies in the background window.

In **translucent** mode, the overlay is opaque. You can see through it, but you can also see it. You can control the degree of translucency through the Options dialog. You can also control whether the toolbar and the objects you draw on the overlay are translucent.

1.6.4 Customizing Toolbar Button Behavior

For each of the seven toolbar buttons that select drawing tools (the seven on the left), you can control:

- whether the tool remains selected after you use it,
- whether the dialog appears each time you press the button, and
- whether the changes you make will become the defaults the next time you run ChartOverlay.

If you choose **Leave Toolbar Button Depressed** in a drawing tool dialog, you will remain in the selected mode after you draw an object of that type. The toolbar button will remain in the down position. If you do not check this item, you will need to press one of the drawing tool buttons each time you want to draw something. This feature is useful when you want to draw several items of the same type. Pressing any other drawing tool button will pop the current button up.

If you check **Don't Show this Dialog Every Time** in a drawing tool dialog, pressing the corresponding button will not bring up the dialog. Your settings will remain the same as last time. If you want to see the dialog, hold down the ctrl key while pressing the button. You can

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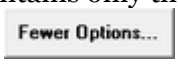
also select an item of the type whose dialog you want to see and the Edit it (button or menu); you may have to draw one first.

When you open a drawing tool dialog and change its values, those values remain in effect until you change them or until you restart the program. If you check **Make These Values the Startup Defaults**, the values you set will be saved when you Exit the program and they will be restored when you start it again.

1.6.5 Large and Small Dialogs (More Options / Fewer Options)

Each of the seven drawing tool buttons (the seven at the left end of the Toolbar) has two dialogs associated with it. The larger version contains all options for the tool. The smaller version contains only the most common options, but it takes up much less screen space.

- The 

button in the larger dialog **switches you to the smaller dialog**.
- The

button in the smaller version **switches you to the larger dialog**.

Like most other dialogs in ChartOverlay, the dialogs associated with the drawing tools remain where you put them. Each time you move a dialog, ChartOverlay "remembers" where you put it.

1.6.6 Saving Your Work

There are two ways you can save your work:

- as an image that combines the background chart with the objects you have drawn; this can be:
  - in the Clipboard, or
  - in a file
- as a document that you can open and then restore at a later time

Saving an Image

To save an image to the Clipboard, either:

- type ctrl-C, or
- choose **Copy Chart Picture to Clipboard** from the menu

Once you have done this, you can simply paste your image into any other program.

To save an image to a file, choose **Save Chart Picture** from the menu. You can save your image in BMP, JPG, GIF or PNG format (for **Windows® 95** only **BMP** format is supported):

- **BMP** can be read by most programs that read graphics, but it is not compressed and will produce a large file;
- **JPG** uses a compression algorithm that loses information, which means that your image will be slightly degraded;
- there are patent issues associated with **GIF** files, so you may wish to avoid them;
- **PNG** is a new format that can be read by an increasing number of programs (especially browsers). It produces very compact files and avoids the problems mentioned for the other formats.

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One sample that we tried yielded the following file sizes (in bytes):

BMP	1,033,470
JPG (90%)	170,762
GIF	59,784
PNG	56,407

Saving Your Work for Later

If you're working with more than one chart (different symbols, different time frames, different dates, etc), the following commands (from the menu) will be of use:

- **New** clears the overlay and creates an Untitled document
- **Open** opens a previously saved document
- **Save** saves the current document if it has a name (if not Save acts like Save As)
- **Save As** asks for you to choose a name and location and saves the current document there

The name of the file used in the last New, Open, Save or Save As command will appear in the title bar at the top of the window.

1.6.7 Changing What You've Drawn

ChartOverlay's extensive editing features allow you to fine tune your Studies to better explore your ideas.

Once you have placed an item on the overlay, you have several ways to change it:

- Edit its properties
- Adjust its defining points
- Adjust secondary lines
- Remove extra secondary lines
- Drag it to another position
- Move it with the arrow keys
- Adjust all objects together to compensate for changes in the price scale

You can select the item and then press the **Edit** button on the toolbar or choose **Edit Selected Item** from the menu. This will bring up the appropriate dialog which will allow you to change any of the options (color, style, etc).

Each item is defined by one or more points that you specified by clicking or by clicking and dragging. When you point at an item (or when it is selected), these points will be **indicated by small circles**. If you **Ctrl-click** on one of these circles **and drag** it, you will redefine the object. This may be a small correction, as when adjusting a Trendline or a Retracement; or it may be a significant change, as when repositioning a pitchfork.

Some objects, such as Pitchforks and Parallel Trendlines, have **secondary lines** (eg, Warning Lines or Action/Reaction Lines) that **can be adjusted**. Simply **Ctrl-click** on the secondary line **and drag** it.

If you have checked **Remove Fibonacci Levels by Ctrl-Checking on Them** on the

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Fibonacci tab of the **Options** dialog, you can easily remove unwanted extra levels for a **Retracement** or **Extension** you have drawn. This option also applies to extra **Warning Lines** for **Andrews' Pitchforks**. To remove a line, hold down the **Ctrl** key and **click** on it. To **Remove All** lines of the same type, hold down the **Alt** key also.

Any object can be repositioned by **Ctrl-click**ing **and drag**ging it.

All objects together can be repositioned by using the arrow keys (if the ctrl key is held down, the object will be moved by an amount that you specify in the Options dialog). This is useful when new bars are added to the right edge of the chart.

All objects can be moved as a group if you hold down the **alt key** and **click and drag** on any one of them. This is useful when new bars are added to the right edge of the chart.

All objects as a group can be expanded or compressed vertically by using the + (or =) and - (or _) keys. This is useful when new highs or lows are added at the right edge of the chart or dropped from the left edge. The ctrl key can be used to increase this effect by an amount that you specify in the Options dialog.

1.6.8 Multiple Overlay Windows

When ChartOverlay is already running and you click its icon, that normally just makes ChartOverlay the active program. If you check **Allow Multiple Copies** on the **General** tab in the Options dialog), you will be able to run additional copies of ChartOverlay, which means you can have multiple simultaneous overlay windows.

When you do this, the first copy you start will be the **Primary Copy**. Only the primary copy will have access to the Hot Key (to hide or show the overlay), and only the primary copy can save changes to your settings (via the Options dialog or the individual tool dialogs).

We recommend caution when using this feature so that you do not overload your CPU or use too much memory. Keeping each overlay window as small as possible should help.

1.6.9 International Number Formats

Depending on the **Format** you have chosen on the **Formats** tab of the **Regional and Language Options** control panel, ChartOverlay will display decimal numbers in the format you prefer, as shown in the table below.

Decimal Separator	Sample		List Separator	Sample
.	1.618		,	0.382,0.618,1.272,1.618
,	1,618		;	0,382;0,618;1,272;1,618
,	1,618		,	Chaos!! 0,382,0,618,1,272,1,618

It is very important that you either **use one of the standard Language (Country) formats** or you Customize a format very carefully. A close look at the table above will show

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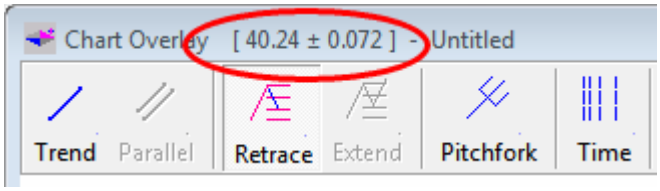
you what would happen if you simply changed the Decimal Symbol to a comma [,] while leaving the List Separator also set to comma (ChartOverlay would not know how to interpret something like *0,382,0,618,1,272,1,618*). ChartOverlay does check for this condition when it starts up, and it will terminate with a warning if it should discover this problem.

Decimal symbols other than period [.] and comma[,] have not been tested. If you try one, please let us know how it works.

1.6.10 Displaying Price Data

You may ask ChartOverlay to display in the title bar the price corresponding to the cursor position. This requires that you provide ChartOverlay with hints, which you can do by right-clicking on any chart point in the overlay window. After clicking, choose Set Price Here from the menu and the Set Price dialog will appear. Enter the price corresponding to the point you clicked; then do it again for a second price.

Once you have set two prices, ChartOverlay will display prices like this:



This feature has an important limitation. Your computer screen is divided into a fixed number of pixels, each of which occupies a small (but non-zero) amount of space. This differs from a mathematical point, which has zero size.

Suppose you are viewing a chart in which prices range from $10 to $30 and suppose the price area of your chart is 5 inches high. Suppose also that your computer screen can display 100 pixels per inch. That would mean that your chart would have 500 (5 x 100) pixels in which to display 2000 cents ($20), or one pixel for each 4 cents of range. Thus, when ChartOverlay reads your cursor's location from the screen, it can only determine price to within a 4 cent range, that is to within ±2 cents; it doesn't know which of four possible values is correct.

Because of this, when ChartOverlay displays a price, it also displays (± error) to remind you that each pixel in your chart is normally associated with a range of prices due to the scaling done by your charting program.

1.7 Fibonacci Numbers

Both the **Fibonacci Number Series** and the **Golden Ratio** occur frequently in nature. Although these ideas were developed independently and in different millennia, they are related by the fact that, as the series grows, the ratio between successive numbers gets closer and closer to the Golden Ratio. Both phenomena (especially the Golden Ratio) can also be seen frequently in the movement of security prices, which is why we are interested in them.

This section provide a brief account of where these numbers come from. Feel free to skip it if you don't care for mathematics. However, if you want to know a little bit about these ubiquitous numbers, give it a try.

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Leonardo of Pisa, who is more commonly known as **Fibonacci** (*filius Bonacci*, son of Bonacci), lived from 1170 until 1250. Born in Pisa (now in Italy), he was raised and educated in what is now Algeria. Considered one of the greatest mathematicians of the Middle Ages, he introduced Arabic numerals and the Hindu-Arabic decimal positional system into Europe.

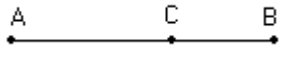
Fibonacci is best known, however, for the series of numbers that arose from the following problem:

> *A certain man put a pair of rabbits in a place surrounded on all sides by a wall. How many pairs of rabbits can be produced from that pair in a year if it is supposed that every month each pair begets a new pair which from the second month on becomes productive?*

This problem yields the series of numbers **0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, ...**, which we call the **Fibonacci Series**. Note that each term in the series is the sum of the two terms that precede it.

The Fibonacci Series is interesting by itself. It has been studied extensively and has many manifestations, some of which can be found in the study of price movements.

What technical analysts have found more interesting, however, is the ratio between successive terms of the series. As the terms get larger, **the ratio between each new term and its predecessor gets closer and closer to 1.6180339887...**, which is usually shortened to **1.618**. By the time the series reaches 55, the ratio is 1.618. There's no evidence that Fibonacci himself was aware of this, however; the earliest known reference was written by Pacioli in 1509.

This number is the **Golden Ratio**. It was used in the Great Pyramid at Gizeh, in Minoan architecture and in the Parthenon. It was extensively discussed by Euclid in his *Elements*, where he described it in terms of a line AB 

that is divided at C in such a way that CB/AC = AC/AB (the line from your elbow (A) through your wrist (C) to your fingertips (B) is an example of such a line). Another way to express this relationship is to say that "the smaller line is to the larger what the larger is to the whole".

If we represent the length of CB by 1 and the length of AC by x, we can write the above relationship as:

$1/x = x/(x+1)$ or
$x + 1 = x^2$ or
$x^2 - x - 1 = 0$,

for which the solutions are $(1 + \sqrt{5})/2$ and $(1 - \sqrt{5})/2$, or 1.618... and -0.618... To explore these ideas further look here.

If we write 1.618... as **Ø** and we write term n of the Fibonacci Series as f_n, then the following series are equivalent (for sufficiently large values of n):

...	$Ø^{-4}$	$Ø^{-3}$	$Ø^{-2}$	$Ø^{-1}$	$Ø^{0}$	$Ø^{1}$	$Ø^{2}$	$Ø^{3}$	$Ø^{4}$	...
...	$\frac{f_{n-4}}{f_n}$	$\frac{f_{n-3}}{f_n}$	$\frac{f_{n-2}}{f_n}$	$\frac{f_{n-1}}{f_n}$	$\frac{f_n}{f_n}$	$\frac{f_n}{f_{n-1}}$	$\frac{f_n}{f_{n-2}}$	$\frac{f_n}{f_{n-3}}$	$\frac{f_n}{f_{n-4}}$	...
...	.146	.236	.382	.618	1	1.618	2.618	4.236	6.854	...

What the second row of the table shows is that when you take ratios of non-adjacent terms you still get Fibonacci ratios (ie, $f_n/f_{n-p} = Ø^p$). Note that for this series of ratios it is also true

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that each term is the sum of its two immediate predecessors..

Certain other numbers are also used:

$Ø^0/2 = .5$
$3Ø^0/2 = 1.5$
$2Ø^0 = 2$
$\sqrt{Ø} = 1.272$
$1/\sqrt{Ø} = .786$

1.8 Free Trial

Please try ChartOverlay to see whether it meets your needs. You can use a fully operational version for up to 14 days without having to send any money. After you have used ChartOverlay for a few days, you will begin to see the Registration dialog whenever you start the program. To continue with your Free Trial, simply click the **Continue Free Trial** button at the bottom of the dialog. When you decide to keep the program, you can register it. This does NOT require that you install the program again.

1.9 Registration

If you wish to continue using ChartOverlay beyond the Free Trial period, you can purchase a license from Omnium Software. When you purchase a license you will receive a **Registration Key** that you will enter using the Registration dialog. This dialog appears automatically when you start the program, or you can make it appear by right-clicking in the overlay window and choosing **Register...** from the menu that appears. It is not necessary to reinstall the software.

1.10 Checking for New Versions

You can now check for a newer version of ChartOverlay; you can do this automatically or manually.

To have ChartOverlay check automatically each time you start it, check **Check for Updates During Startup** on the **General tab in the Options dialog**.

To check manually, you can either choose **Check for Updates** from the menu; or you can click the **Check for Updates** button in the About dialog.

1.11 Storing Application Data

Prior to Windows® Vista, it was common for applications to store any data they wrote in the folder where the application itself resided (unless the user directed otherwise). Usually, this would have been somewhere in the "C:\Program Files" folder.

Since the release of Vista, Windows® has discouraged applications from writing in "C:\Program Files". While this presents some short-term inconvenience, in the longer term it allows Windows® to offer better security.

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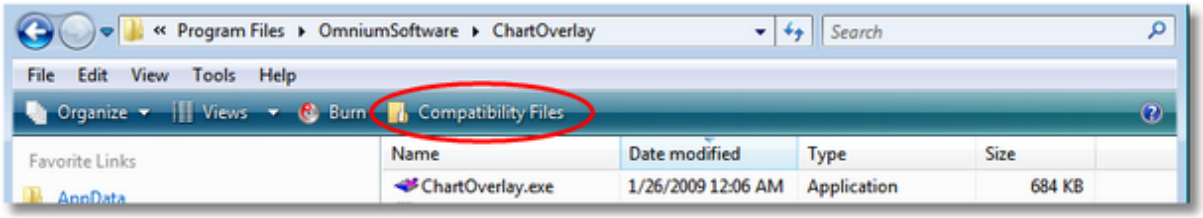
To have its way, while still allowing older programs to run properly, Vista put any files that normally would have been written to the Application folder (inside "C:\Program Files") into a special location (called Virtual Store). To help users find these files without having to learn the lengthy new pathname, Vista introduced a **Compatibility Files** link near the top of the list of Application folder files in Windows® Explorer.



Version 2.0.9 (and earlier) of ChartOverlay stored data files in the Application folder (or Virtual Store) by default. These would include:

Application Data	
ChartOverlay.ini	the file in which application settings (options) are stored
ChartOverlayDBLog.txt	the file to which debugging info is written
ChartOverlayDBLog.prv.txt	the previous version of **ChartOverlay**DBLog.txt; **ChartOverlay**DBLog.txt is cut off after 250,000 bytes and renamed to **ChartOverlay**DBLog.prv.txt
ChartNotes	the **folder** in which your work is saved if you use the Save command
Images	the **folder** in which your images are saved if you use the Save Chart Picture command

Version 2.2.21 (and later) follows the conventions for Vista (and later) when storing Application Data.

Because the pathname for this folder is still rather long, ChartOverlay provides an **Application Data** button in the About dialog. This button will open the folder containing your application data.

1.12 Support

If you encounter problems with ChartOverlay, you can request assistance from support@omniumsoftware.com. Clicking **Support** in the About dialog will also start a new eMail.

Please understand that we cannot see your computer screen. All we know about the problem you are having is what you tell us. Simply saying, *It doesn't work*, doesn't really tell us much and only delays our response to your problem.

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It really helps if you can tell us:

- What you did (in enough detail for us to repeat it here);
- What you expected as a result;
- What actually happened.

Sending us a screen shot is often very helpful, as is telling us the exact wording of any error message you may have seen.

We also welcome comments on this Help file. If anything is unclear or if you find typos or other errors, please let us know.

1.13 Sticky Cursor

A few users have reported that the cursor seems *sticky*, that it doesn't move smoothly when they move the mouse. This problem appears to be dependent on individual computers. Some users who had the problem have reported that it went away after they upgraded to new hardware (of course, we are not recommending that you buy a new computer simply to cure a problem with one application).

One thing we do recommend (if you're comfortable doing so) is that you check with your computer manufacturer (or with Microsoft) for updated drivers. Drivers run at a deep level of the operating system and can cause unusual problems if they are imperfect (we once cured a screen-blanking problem by upgrading a modem driver). ChartOverlay relies on some advanced features of Windows® 2000 and XP and a faulty driver could cause problems.

If updating your drivers does not help (or if updating your drivers is not a viable option for you), here are some other things you can try. Each will make your computer do less work while you are moving the cursor. Try them one at a time (see **Options** dialog); if necessary, try combinations:

1. Uncheck **With Extensions**
2. Uncheck **Enable Crosshairs**
3. Set **Only redraw cursor** to a lower number
4. Choose **Translucent** instead of **Transparent *AND*** check **Translucent Toolbar** and **Translucent Lines**
5. Choose **Static** mode (least desirable)

1.14 Disclaimer

Nothing in this Help file or in the ChartOverlay program should be construed as offering financial advice or a recommendation to buy or sell any financial instrument.

ChartOverlay is simply a tool and you are responsible for determining how to make best use of it to achieve your own objectives.

Information in this Help file is intended to give a general idea of how the various studies are used so you can decide whether you want to seek additional information from other sources.

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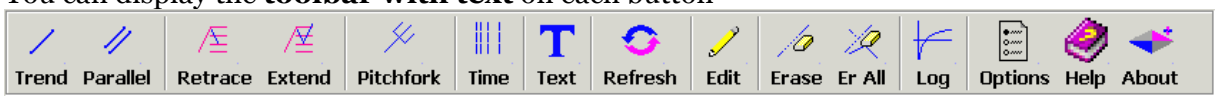
2 Controls

You can use the Toolbar, the Menu or the Keyboard to control ChartOverlay.

2.1 Toolbar

A toolbar at the top of the overlay window provides access to the most common options.

You can display the **toolbar with text** on each button



or **without text**. Omit the text if you want to save space (see the Options dialog). If you choose not to display the text, you can obtain a hint about what any button does simply by pointing at it.

If you notice that some toolbar buttons are disabled, do not worry. This is normal. Some operations (eg, Parallel or Erase) require that you have an existing object selected. If you haven't drawn anything yet, or if nothing is selected, some buttons will be disabled.

You can also Hide the Toolbar altogether (see the Options dialog). If you do hide the toolbar, all of its functions can be accessed through the right-click menu.

The seven buttons on the left (**Trend ... Text**) are **drawing tool buttons**:

- One of these buttons must be depressed before you can draw on the overlay.
- Unless you specify otherwise, pressing any of these buttons will bring up a dialog that lets you choose the properties of the object you wish to draw.
- Each of these dialogs actually has two forms, a long form that displays all options and a short form that saves space by displaying only the most common options.
- You can also choose whether a drawing tool button pops up after you use it or remains depressed, which allows you to keep drawing objects of the same type

Trend - Selects the **Trendline** drawing tool. This button also allows you to draw **Speed Resistance Lines**. You draw the Trendline by simply drawing a line on the underlaying chart that connects points of interest.

Parallel - Selects the **Parallel Trendline** drawing tool. This button also allows you to draw **Action Reaction Lines**. You draw these lines by simply clicking a point of interest on the underlying chart.

Retrace - Selects the **Fibonacci Price Retracement** drawing tool. This button also allows you to draw **Fibonacci Arcs, Fibonacci Fans** and **Fibonacci Time Extensions**. You draw these lines by simply drawing a line on the underlying chart that connects points of interest.

Extend - Selects the **Fibonacci Price Extension** drawing tool. If you wish, you can connect the extension to the original impulse move to form a three-wave drawing.

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One common way to draw an extension is to simply click on the point from which the extension begins.

Pitchfork - Selects the **Andrews' Pitchfork** drawing tool. This button also allows you to draw several complementary lines. You draw the Pitchfork by simply clicking three pivots on the underlying chart.

Time - Selects the **Time Cycle** drawing tool. You can draw either Fibonacci cycles or fixed cycles. You draw the cycles by drawing a line connecting a user-specified number of bars on the underlying chart.

Text - Selects the **Text** drawing tool. You can use this tool to add formatted text to the overlay.

Refresh - Clears the overlay and redraws all objects. In Static mode (eg, for Windows® NT, 95, 98, ME), updates the background.

Edit - Opens the dialog corresponding to the selected object so that you can modify its properties.

Erase - Erases the selected object. If you have started creating an object (eg, a Pitchfork or a free-standing Extension), the partial object will be erased. You can also use the Delete key to erase the selected object (or the object you are pointing at).

Er All - Erases everything you have drawn on the overlay. If you press this button by accident, you can recover the erased information by choosing Undo Erase from the menu.

Log - Toggles between Arithmetic and Logarithmic scaling.

Options - Opens the Options dialog.

Help - Opens this Help file.

About - Opens the About dialog that provides information about ChartOverlay, such as the version you are running.

2.2 Menu

If you **right-click** anywhere in the overlay drawing area, the menu shown below will appear. This menu contains everything you will find on the toolbar, plus a few additional items.

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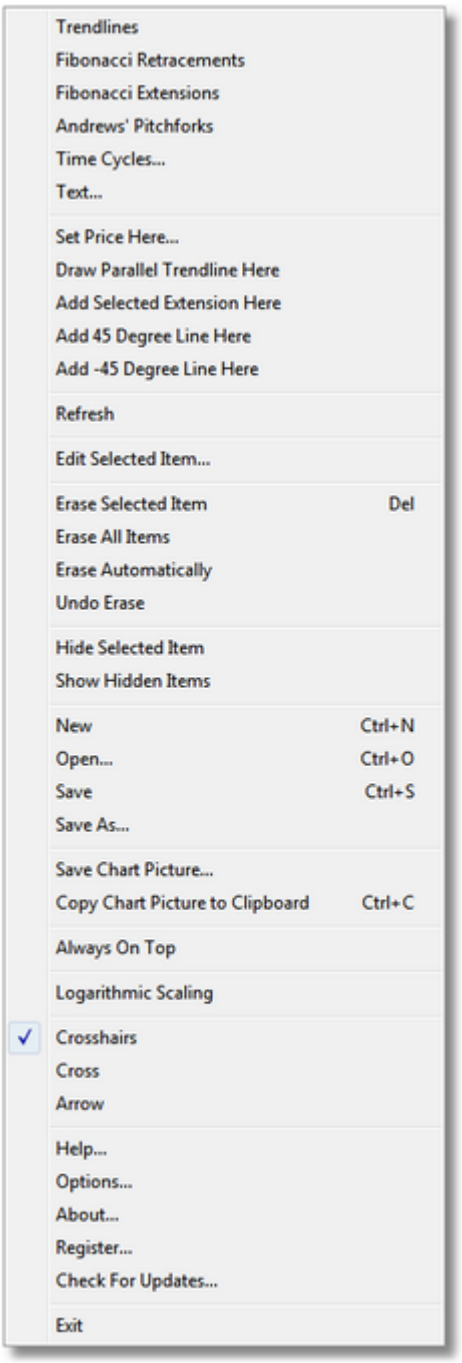

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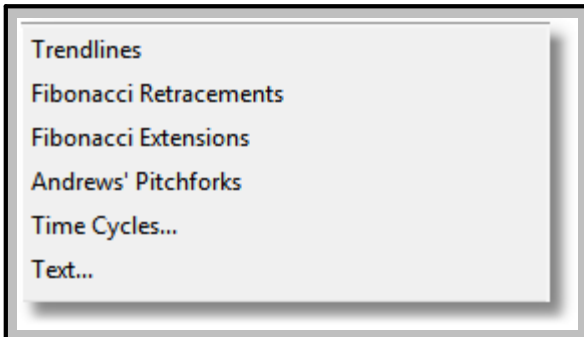
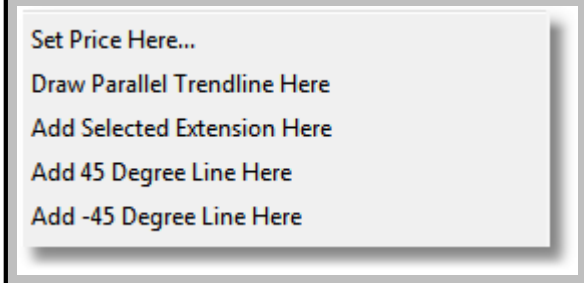
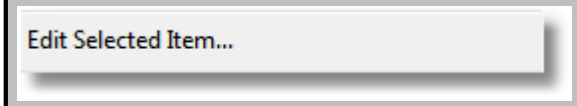
	**Trendlines** is equivalent to pressing the **Trend** button on the toolbar. **Fibonacci Retracements** is equivalent to pressing the **Retrace** button on the toolbar. **Fibonacci Extensions** is equivalent to pressing the **Extend** button on the toolbar. **Andrews' Pitchforks** is equivalent to pressing the **Pitchfork** button on the toolbar. **Time Cycles** is equivalent to pressing the **Time** button on the toolbar. **Text** is equivalent to pressing the **Text** button on the toolbar.
	**Set Price Here** lets you specify the price corresponding to a point on your chart. Once you do this for two prices, ChartOverlay will display the corresponding price in the title bar (top of the window) when you move the cursor. **Draw Parallel Trendline Here** is equivalent to pressing the **Parallel** button on the toolbar, except that it uses the point you clicked to make the drawing. When the selected item is a Pitchfork, the new parallel will be drawn as a Warning Line (unless you have chosen **Automatically Extend** in the **Parallel** dialog). **Add Selected Extension Here** is equivalent to pressing the **Extend** button on the toolbar, except that it uses the point you clicked to make the drawing. **Add 45 Degree Line Here** draws a 45° line through the point you clicked. **Add -45 Degree Line Here** draws a -45° line through the point you clicked.
	Refresh clears the overlay and redraws all objects; in Static mode (eg, for Windows® NT, 95, 98, ME), updates the background.
	**Edit Selected Item** is equivalent to pressing the **Edit** button on the toolbar, except that if you are pointing to a item it uses that instead of the one that was selected.

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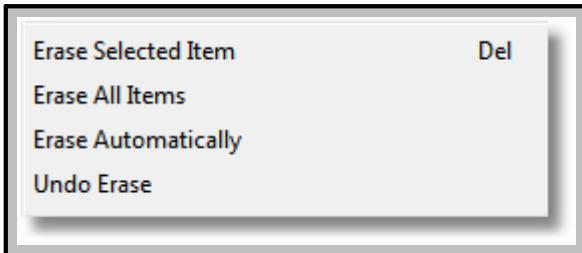
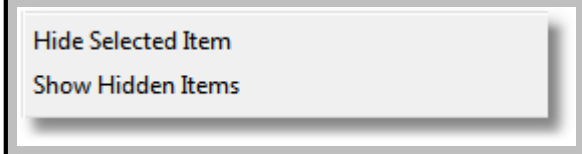
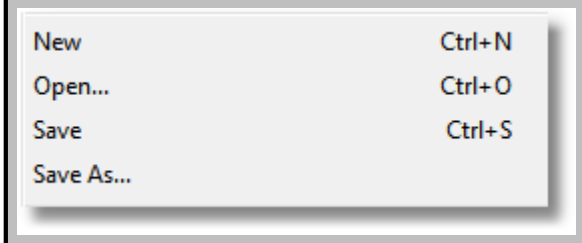
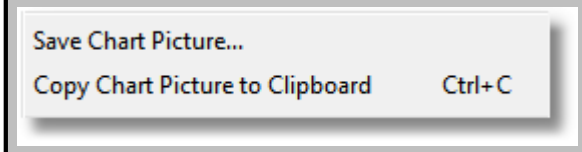
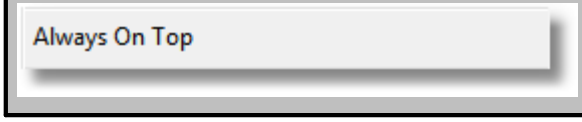
	**Erase Selected Item** is equivalent to pressing the **Erase** button on the toolbar, except that if you are pointing to an item it uses that instead of the one that was selected. You can also use the **Delete key**. If you have started creating an object (eg, a Pitchfork or a free-standing Extension), the partial object will be erased. **Erase All Items** is equivalent to pressing the **Er All** button on the toolbar. **Erase Automatically**, when selected, erases all previous lines whenever you draw a new line. **Undo Erase** whatever you just erased (Erase Selected or Erase All).
	**Hide Selected Item** makes the selected item temporarily invisible. If your drawing is cluttered, you can use this command to simplify it. **Show Hidden Items** makes all hidden items visible again.
	**New** erases everything you have drawn and creates a new empty document. **Open** erases everything you have drawn and replaces it with a document that you saved previously. **Save** writes all of the objects you have drawn to a file in a format that can be reloaded later. **Save As** asks for a file name and then writes all of the objects you have drawn to that file.
	**Save Chart Picture** asks for a file name and then writes an image combining the overlay and its background. **Copy Chart Picture to Clipboard** copies an image combining the overlay and its background to the Clipboard, from which it can be pasted into another application.
	**Always On Top** makes the overlay remain on top of other windows even when you click in them (or it turns this feature off).

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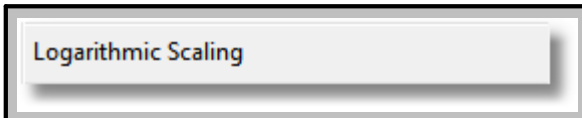
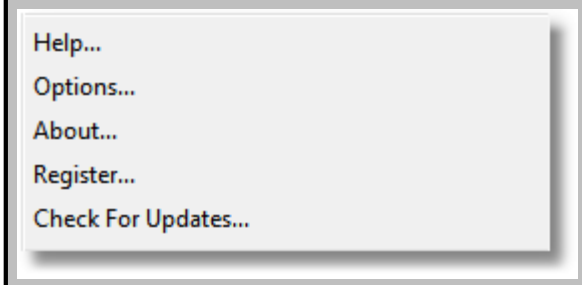
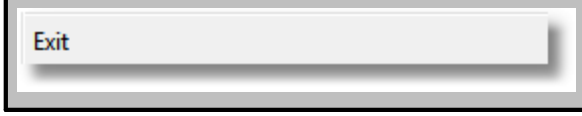
	**Logarithmic Scaling** turns Logarithmic Scaling on or off. When Logarithmic Scaling is on, equal vertical distances on a chart represent equal percentage changes in price. When it is off, scaling is **Arithmetic** (equal vertical distances on a chart represent equal changes in price amount).
	Crosshairs selects the crosshair-style cursor. **Cross** selects the Cross cursor. **Arrow** selects the Arrow cursor.
	**Help** opens the Help dialog. **Options** opens the Options dialog. **About** opens the About dialog that provides information about ChartOverlay. **Register** opens the Registration dialog so that you can enter (or check) your Registration Key. **Check For Updates** consults the Omnium Software server and tells you whether a new version of ChartOverlay is available.
	**Exit** terminates the program.

2.3 Keyboard

You can use the keyboard to modify some operations, or to issue various commands, or to modify items you have drawn:

- Modifier Keys
- General Keyboard Commands
- Editing Keys
- Keys That Modify Trendlines
- Keys That Modify Andrews Median Lines (Pitchforks)

Modifier Keys

Use the modifier keys as follows to affect the way some features of ChartOverlay operate.

Ctrl

- If the Ctrl key is not pressed, Click or Click and Drag will create a new object

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- **Use the Ctrl key to edit or manipulate objects you have drawn**

Drag an existing object to move it to a new position
Adjust a defining point to refine an object you drew previously
Remove extra lines from a Fibonacci Retracement or Extension
Remove extra Warning Lines from an Andrews Pitchfork
Select an object so you can perform some operation on it
If you are upgrading from Version 2.0 [the original version], this is a change in the way that ChartOverlay behaves. In Version 2.0, the Ctrl key inhibited these actions; now it allows them. We apologize for any inconvenience this may cause, but feedback from users convinced us that the new behavior would be more natural.

- **Temporarily Reverse Default Settings**

Holding down the Ctrl key **while clicking on a tool button** temporarily reverses the **Don't Show this Dialog Every Time** option for the corresponding tool dialog. For example, if Don't Show this Dialog Every Time is checked in the Trendline dialog and you Ctrl-Click the Trendline tool button, the Trendline dialog will open (or if it's not checked and the dialog normally opens when you click the button, Ctrl-Clicking the Trendline tool button will select the tool without opening the dialog)
Holding down the Ctrl key while clicking on a blank area (ie, not on an existing object) temporarily reverses the setting of the **Erase Automatically** menu item

- **Increase The Effect of Movement and Compression Keys**

When moving all existing objects with the **arrow keys** (see below), moves by the amount specified in the Options dialog rather than by one pixel
When **expanding or compressing the vertical scale** with the **+ and - keys** (see below), does so by the amount specified in the Options dialog rather than by one percent

Shift

- **Make Horizontal or Vertical**

Makes it easier to draw **Trendlines or time cycle calibration lines** that are Horizontal or Vertical
Drags objects you have drawn or adjusts defining points either Horizontally or Vertically

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Alt

- **Affect All**

When dragging, **drag all objects as a group** instead of dragging a single object
When you are **removing extra lines** from a Fibonacci or Andrews Pitchfork object, removes all lines of a particular type (eg, all Arc Extensions, all Fan Retracements or all Andrews Warning Lines)

General Keyboard Commands

These commands are not specific to any type of item you may have drawn.

Ctrl-C	Copies an image combining the overlay and its background to the Clipboard, from which it can be pasted into another application
Ctrl-N	**New** erases everything you have drawn and creates a new empty document
Ctrl-O	**Open** erases everything you have drawn and replaces it with a document that you saved previously
Ctrl-S	**Save** writes all of the objects you have drawn to a file in a format that can be reloaded later
Delete	**Delete** erases the selected object (or the object pointed at)

Editing Keys

These commands can be used to change the vertical scale of objects you have drawn. Each time you press one of the expand/compress keys, the stretch factor is incremented (or decremented) by one (unless you are also pressing the **Ctrl key**). The stretch factor is then used as a percentage and each point is moved away from (or towards) the midline by that percentage. This allows you to adjust to changes in the scale of the chart in the background. If you simultaneously press the **Ctrl key**, then the value you specify on the **Editing tab** of the **Options dialog** will be used as the increment (or decrement) (default = 5).

You can also move objects around in the overlay window to correct for the addition or removal of price bars. The objects are moved by one pixel each time you press an arrow key, unless you simultaneously press the **Ctrl key**, in which case the value you specify on the **Editing tab** of the **Options dialog** will be used (default = 5).

You can also move an object by dragging it while pressing the **Ctrl key**, or you can move all objects by dragging any object while pressing the **Ctrl** and **Alt keys**.

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+ or =	Use either key to **expand** the **vertical scale** when the scale of the chart in the background changes
- or _	Use either key to **compress** the **vertical scale** when the scale of the chart in the background changes
←	Use this key to move all objects on the overlay left one pixel (more with **Ctrl key**)
→	can be used to move all objects on the overlay right one pixel (more with **Ctrl key**)
↑	can be used to move all objects on the overlay up one pixel (more with **Ctrl key**)
↓	can be used to move all objects on the overlay down one pixel (more with **Ctrl key**)

Keys That Modify Trendlines

These keys can be used when you have selected an existing Trendline (or when you just point at it). When you draw a Trendline, the options you chose in the Trendline dialog will be applied. Should you wish to change some of those options after you have drawn a Trendline, simply type one of these characters.

See the Trendlines section in **Dialogs** for a discussion of these options.

e	Turn line extensions on or off (to switch between a complete line and a line segment)
g	Turn segment bisector on or off
b	Turn Gann Angle lines on or off
s	Turn Speed Resistance lines on or off

Keys That Modify Andrews Median Lines (Pitchforks)

These keys can be used when you have selected an existing Pitchfork (or when you just point at it). When you draw a Pitchfork, it will be drawn in the style you chose in the Andrews dialog. Should you wish to change the style after you have drawn a Pitchfork, simply type one of these characters.

See the Andrews' Pitchforks section in **Studies** for further discussion and for examples of the different styles.

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a	Standard Andrews Median Lines
s or m	Modified Schiff Median Lines (as used by Dr Andrews)
o	Original Schiff Median Lines (as defined by Jerome Schiff)
i or r	Inside (or Reverse) Median Lines

3 Studies

The following sections provide brief overviews of the various studies available in ChartOverlay. These descriptions are very simplified and are only intended to show you how to access the various tools and their features. They do not provide expert advice for using the tools to develop trading systems. There are several books that give a much better explanation of the rules and guidelines for using these studies.

See disclaimer..

3.1 Trendlines

Trendlines are commonly drawn by connecting two (or more) lows or two (or more) highs on a chart. In a rising market, most people will use lows, while in a falling market highs are typically used. Some analysts prefer to use only the highs and lows of bars, while others use opens or closes or other values that ignore extremes in favor of other factors such as nearby support and resistance. Because Trendlines that have several touches are generally considered to be stronger, you may want to draw your Trendlines to maximize the number of touches.

Prices tend to respect Trendlines and to remain on one side of (and move in the direction of) a Trendline. When a Trendline is broken, you should look for other signs to indicate whether the trend may have changed. See Disclaimer.

To start drawing a Trendline, press the

button, or choose **Trendlines** from the menu. Once you have chosen the options you prefer, draw the Trendline by drawing a line connecting two significant points on your chart.

The Trendline dialog offers you several options. When you draw a Trendline, the options you

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have chosen there will be used. If you wish to change any of these options after you have drawn a Trendline, simply select the Trendline (or point at it) and type the appropriate letter:

e	Turn line extensions on or off (to switch between a complete line and a line segment)
g	Turn segment bisector on or off
b	Turn Gann Angle lines on or off
s	Turn Speed Resistance lines on or off

3.2 Speed Resistance Lines

Speed Resistance Lines are normally used to divide a price swing into three equal parts. The first line is drawn like a Trendline except that it is drawn from the beginning of a price move to its end. The other two lines start at the same point but rise (fall) at 1/3 and 2/3 respectively of the rate of the first line.

Prices should remain above (below) the 2/3 line. If they breach that line, they should move to the 1/3 line and find support (resistance) there. See Gann Fans and Fibonacci Fans, which behave in a similar manner. See Disclaimer.

To draw Speed Resistance Lines you must draw a Trendline (press the

button, or choose **Trendlines** from the menu). The Speed Resistance Lines are an option associated with Trendlines.

Speed Resistance Lines are normally drawn so that, if a vertical line were drawn from the second point of the Trendline to the Price Level of the first point, that vertical line would be divided into three equal parts. If for some reason you want something different, you can specify your own **Levels**. A negative number will produce a line at a smaller angle than the Trendline (which is how most people use Speed Resistance Lines); a positive number will produce a line at a larger angle.

3.3 Gann Fans

Gann Fans are based on the work of W. D. Gann who believed strongly in the use of geometric angles. He considered a movement of one price unit for each time unit to be ideal. On a chart for which these units have the same spacing (vertical and horizontal), this movement would follow a line drawn at a 45 degree angle. Gann considered this **1/1 line** to be primary line in the fan. He also considered lines drawn at 1/8, 1/4, 1/3, 1/2, 2. 3. 4 and 8 times the rate of the primary line to be significant. Most charts do not have the spacing required to produce true Gann Angles. However, if you draw a line that represents equal changes in time and price units (as you define those units), the other lines drawn by ChartOverlay will have the rates of change defined by Gann.

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The primary (1/1) line provides support in an uptrend and resistance in a downtrend. If it is breached, a major reversal may be occurring and the other lines, in succession, can be expected to offer support or resistance. See Speed Resistance Lines and Fibonacci Fans, which behave in a similar manner. See Disclaimer.

To draw a Gann Fan Lines you must draw a Trendline (press the

button, or choose **Trendlines** from the menu). Gann Fans are an option associated with Trendlines.

3.4 Parallel Trendlines

There are many circumstances in which you may wish to draw lines **Parallel** to a **Trendline**. One example is a price channel. Another is Action/Reaction Lines. See Disclaimer.

To start drawing a Parallel Trendline, press the

button, or choose **Draw Parallel Trendline Here** from the menu. Once you have chosen the options you prefer, draw the parallel Trendline by clicking on any point through which you want the line to pass (if you use the menu, the point on which you clicked for the menu will be used to draw the line).

If the line to which you are adding a **Parallel** is a **Pitchfork**, the new **Parallel** will be drawn as a **Warning Line** (unless you have chosen **Automatically Extend** in the **Parallel** dialog).

3.5 Action/Reaction Lines

Action/Reaction Lines are based on the work of Alan Andrews (see also, Andrews' Pitchforks), who taught his methods in the 1960s and 1970s after he retired from trading. Much of his work was based on the earlier work of Roger Babson.

Action/Reaction Lines are based loosely on Newton's Third Law of Motion. A significant price swing is chosen and a Center Line (or Trendline) is drawn. Then a parallel line (Action Line) is drawn through a preceding pivot and a matching Reaction line is drawn at an equal distance from the Center Line. This can be done for several pivots. An alternate method is to draw one Action Line and then draw Reaction Lines at equal intervals. Look for reversals near the Reaction Lines.

Look for significant price action at or near the Reaction lines. See Disclaimer.

To draw Action/Reaction Lines, use the Parallel Trendline dialog (press the

button, or choose **Draw Parallel Trendline Here** from the menu) and then click on any point through which you want the Action Line to pass (if you use the menu, the point on which you clicked for the menu will be used to draw the line). Depending on which option you chose, one or several Reaction Lines will be drawn. The Action/Reaction Lines are an option associated with Parallel Trendlines.

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While the Action Line is normally drawn to the left of the Center Line, with the Reaction Line(s) to the right, you can reverse this if you wish.

Once you have drawn a set of Action/Reaction Lines, you can adjust all lines in the set by moving any one of them.

3.6 Fibonacci Price Retracements

A **Fibonacci Price Retracement** is a reversal that occurs after a significant price movement. Technical analysts have observed that the size of a reversal is often related to the **Golden Mean**, **1.618...** (usually the ratio of the reversal to the original move is a positive or negative power of 1.618...). 1.618... is also the limit ratio of successive terms in the sequence of Fibonacci Numbers, 0, 1, 1, 2, 3, 5, 8..., which is where the name comes from. These Fibonacci ratios occur often in nature as well as in the study of price movements.

The various Fibonacci Levels are somewhat like support/resistance lines. They act as targets and, whether breached or honored, they act as signals. If Fibonacci Retracements are drawn for more than one price movement, or for different time scales, levels that are common to two or more different Retracements are believed to have greater significance, regardless of whether they represent the same ratios.

Trendlines are commonly drawn by connecting two (or more) lows or two (or more) highs on a chart. In a rising market, most people will use lows, while in a falling market highs are typically used. Some analysts prefer to use only the highs and lows of bars, while others use opens or closes or other values that ignore extremes and reflect a larger number of trades. Because Trendlines that have several touches are generally considered to be stronger, you may want to draw your Trendlines to maximize the number of touches. See Disclaimer.

To start drawing a Fibonacci Retracement grid, press the

button, or choose **Fibonacci Retracements** from the menu. Choose the options you prefer (**Fibonacci Levels** must be **enabled**). Then draw the Retracement grid by drawing a line connecting a high point and a low point on your chart. You can draw from a high to a low or a low to a high, but you should start from the earlier point (the one to the left of the other).

Note: If you have drawn a Fibonacci Retracement and it is the selected item, the **title bar will display the current cursor position as a (time, price) Retracement or Extension** of the movement represented by the selected item (where 0, 0 is the end of the move); in other words, **for any point on your chart, you can immediately see how much Time and Price will have Retraced or Extended your original move simply by pointing at it**. Try it! Draw a Retracement line and then move the cursor around while watching the numbers displayed in the title bar at the top of the window.

3.7 Fibonacci Fans

Fibonacci Fans are similar to Gann Fans and Speed Resistance Lines except that they use Fibonacci Levels to create the fan lines. To create a Fibonacci Fan draw a line (left to right) between a significant low and high (or high and low). The fan lines will then be drawn so that they meet a vertical line drawn at the second point you chose at the Fibonacci Levels you specified.

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As with the other fans, the fan lines provide support or resistance and after a breach of one line, you should look for support or resistance at the next one. See Disclaimer.

To draw a Fibonacci Fan, press the

button, or choose **Fibonacci Retracements** from the menu. Choose the options you prefer (**Fibonacci Fan** must be **enabled**). Then draw as you would for a Retracement.

3.8 Fibonacci Arcs

Fibonacci Arcs are semi-circles drawn to intersect a line drawn from a low to a high (or a high to a low) at specified Fibonacci Levels. The arcs are drawn from the second (right-most) point. Note that the arcs intersect the Trendline, not a vertical line drawn from the second point.

Look for support and resistance as prices approach the arcs. You may want to combine Fibonacci Arcs and Fibonacci Fans and to give special attention to the points at which the fan lines cross the arcs. See Disclaimer.

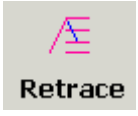
To draw Fibonacci Arcs, press the

button, or choose **Fibonacci Retracements** from the menu. Choose the options you prefer (**Fibonacci Arcs** must be **enabled**). Then draw as you would for a Retracement.

3.9 Fibonacci Time Extensions

Fibonacci Time Extensions focus on the **time** axis **rather than** the **price** axis. As with price extensions, you start by drawing a line that describes a significant price movement. The time extensions are a series of vertical lines drawn using the original movement as a base and specified Fibonacci Ratios to create the intervals.

Look for significant events at the vertical lines that indicate the time extensions. See Disclaimer.

To draw Fibonacci Time Extensions, press the 

button, or choose **Fibonacci Retracements** from the menu. Choose the options you prefer (**Fibonacci Time Extensions** must be **enabled**). Then draw as you would for a Retracement.

3.10 Fibonacci Price Extensions

A **Fibonacci Price Extension** is a resumption of a prior move. The potential Fibonacci Levels for an **Extension** are calculated by applying Fibonacci Ratios to the extent of the prior move (using either the difference in prices for that move or the percentage by which the price changed. According to Robert Prechter, a leading exponent of the Elliott Wave Principle, price extensions are more reliable than price Retracements (when applied correctly).

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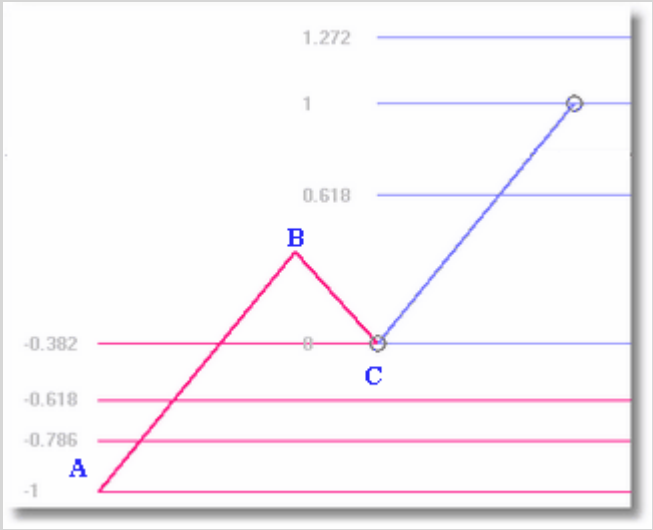
Price extensions can be used to set price targets and to assess the strength of a trend. See Disclaimer.

Because there are a number of techniques for drawing **Extensions**, ChartOverlay provides several options to make it easier to get what you want. The following table explains several methods.



This method requires that you first draw (or select) a **Retracement**. and then click a point indicating where you expect the **Extension** to begin.

To employ this method, you must make the following settings:

- On the **Fibonacci tab i**n the **Options** dialog, be sure **Allow Extensions Without Retracements** is ***NOT*** **checked**;
- In the **Fibonacci Retracements** dialog, be sure **End of Retracement** is specified in the **Extend From** group (at the bottom of the left column).

These settings will persist if you don't change them and if you have **Make These Values the Startup Defaults** in the **Fibonacci Dialog**.

To draw a Fibonacci **Extension** grid, first draw a **Retracement** (**A** to **B**); then press the

button (or choose either **Fibonacci Extensions** or **Add Selected Extension Here** from the menu). Then draw the extension grid by clicking on the point (**C**) at which you want the extension to begin (if you chose **Add Selected Extension Here** from the menu, the point on which you clicked for the menu will be used to start the extension (Point C)).

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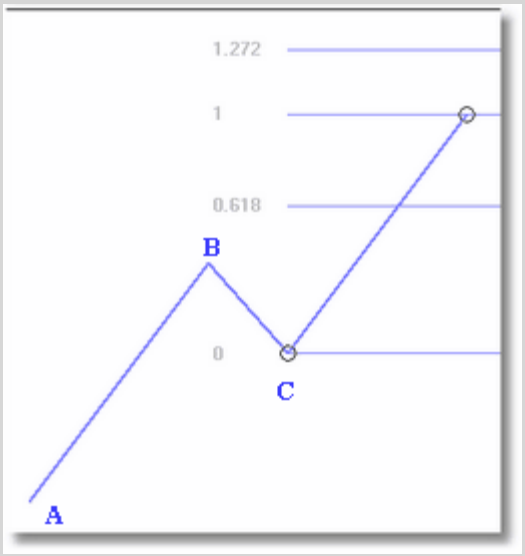

Next is a method suggested by Fibonacci guru Rick West. It bypasses the Retracement step and draws the **Extension** in one step**.**

To employ this method, you must make the following setting:

- On the **Fibonacci tab i**n the **Options** dialog, be sure **Allow Extensions Without Retracements** is **checked**.

This setting will persist if you don't change it.

To draw a Fibonacci **Extension** grid, press the

button (or choose either **Fibonacci Extensions** or **Add Selected Extension Here** from the menu). Then draw the extension grid by clicking on points **A**, **B** and **C** in order (if you chose **Add Selected Extension Here** from the menu, the point on which you clicked for the menu will be used to start the drawing (Point A)).

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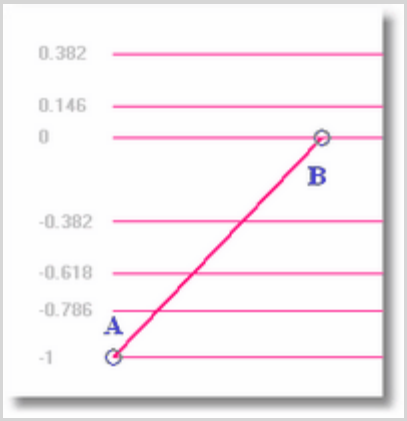


This method allows you to draw your **Retracement** and **Extension** in a single operation.

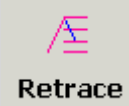
Retracement Levels are drawn with **negative** values, starting from the end of your move (B) and going back towards (and perhaps past) the beginning (A). **Extension Levels** are drawn with **positive** values, starting from the end of your move (B) and going away from the beginning (A).

To employ this method, you must make the following setting:

- In the **Fibonacci Retracements** dialog, be sure **End of This Move** is specified in the **Extend From** group (at the bottom of the left column).

This setting will persist if you don't change it and if you have **Make These Values the Startup Defaults** in the **Fibonacci Dialog**.

To draw a Fibonacci **Extension** grid, you simply draw a



Retracement. Press the button (or choose **Fibonacci Retracements** from the menu). Then draw the extension grid by drawing a line from **A** to **B**.

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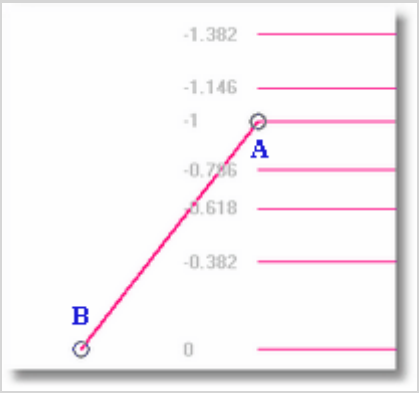

This method ignores the distinction between **Retracements** and **Extensions**. It draws a series of **Fibonacci Levels** whose numbers start at 0 and grow in the same direction. Except for 0, all numbers will be negative, so you should **ignore the minus signs**.

To employ this method, you must make the following setting:

- In the **Fibonacci Retracements** dialog, be sure **End of This Retracement** is specified in the **Extend From** group (at the bottom of the left column).
- In the **Fibonacci Levels** dialog, check the **0 Retracement Level**.

This setting will persist if you don't change it and if you have **Make These Values the Startup Defaults** in the **Fibonacci Dialog**.

To draw a Fibonacci grid, you simply draw a **Retracement**. Press the Retrace button (or choose **Fibonacci Retracements** from the menu). Then draw the grid by drawing a line from **A** to **B** (**Note that A and B are reversed for this method so that 0 will be the level at which the move began**); in other words, in this case we begin drawing at the end of the move and end at the beginning.

3.11 Andrews' Pitchforks

Andrews' Pitchforks are based on the work of Alan Andrews, who taught his methods in the 1960s and 1970s after he retired from trading.

Those interested in learning more about Dr. Andrews' techniques may wish to visit *MarketGeometry.com* where they will find an abundance of excellent free and premium information presented by Timothy Morge, a long-term professional trader; or they may wish to consult his book, *Trading With Median Lines*, which offers an excellent detailed

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discussion. Another long-term user of Dr. Andrews techniques, Gordon DeRoos at PitchforkPrimer.com, offers both a well-regarded course and a fine book, *Trading With the Pitchfork*. Patrick Mikula has also written a good book describing Dr. Andrews' methods and some ideas of his own: *The Best Trendline Methods of Alan Andrews and Five New Trendline Techniques*.

Pitchforks are drawn based on three pivot points (high, low, high or low, high, low). A median line is drawn from the first pivot through the midpoint of the second two pivots; parallel lines are then drawn from the second two pivots. Warning lines can be added parallel to the median line. Andrews taught that prices would return to the median line about 80% of the time. Prices also have a tendency to reverse at key warning lines.

To start drawing an Andrews' Pitchfork, press the

button, or choose **Andrews' Pitchforks** from the menu. Once you have chosen the options you prefer, draw the Pitchfork by clicking three points on the chart. These three points should correspond to a low, a high and a low (or a high, a low and a high) and they should be clicked in order from left to right.

Sometimes a standard Pitchfork is too steep to be useful. Jerome Schiff, a friend and student of Andrews, discovered that drawing such Pitchforks from a point on the original price bar that is midway between the first pivot and the second or third pivot (50%) gives better results. Dr. Andrews later adopted (and adapted) this idea (see examples below).

Three alternate styles of Median Lines (Pitchforks) are supported (see examples below). Should you want to use one of these styles, you can either change the default style in the Pitchfork dialog; or you can convert an existing Pitchfork by typing one of the letters in the table below after you have selected a Pitchfork (or when you just point at it).

a	Standard Andrews Median Lines
s or m	Modified Schiff Median Lines (as used by Dr Andrews)
o	Original Schiff Median Lines (as defined by Jerome Schiff)
i or r	Inside (or Reverse) Median Lines

These are examples of the different styles of Median Lines, along with descriptions of how they are drawn.

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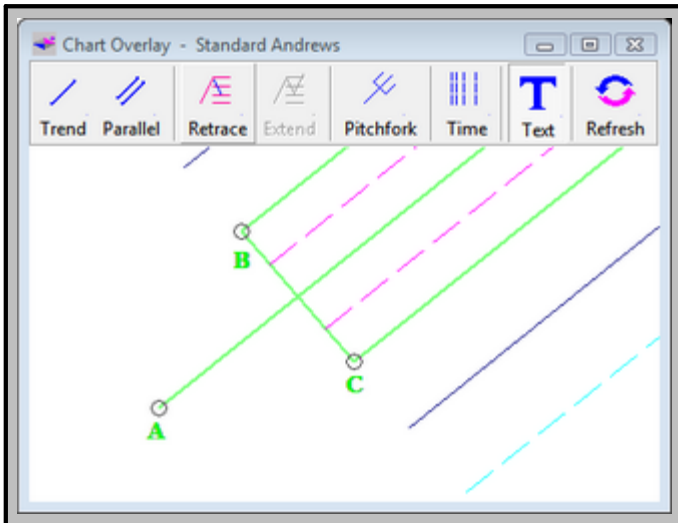
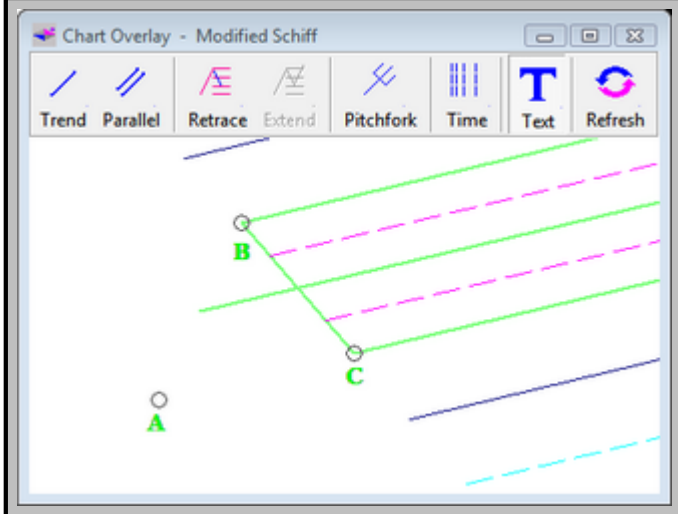


When drawing Standard Andrews Median Lines, you first choose three alternating pivot points (high, low, high or low, high, low), which are often labeled A, B and C.

Then ChartOverlay draws a line between B and C.

Next ChartOverlay draws the Median Line from A through the midpoint of line BC.

To switch to this style of Median Lines from any of the others, simply select the item (or point at it) and type a.



When drawing Modified Schiff Median Lines, you again choose three alternating pivot points (high, low, high or low, high, low).

Then ChartOverlay draws a line between B and C.

This time, however, ChartOverlay draws the Median Line from the midpoint of line AB through the midpoint of line BC, which results in lines with a more gradual slope. (This is Dr. Andrews' variation of Schiff's original idea.)

To switch to this style of Median Lines from any of the others, simply select the item (or point at it) and type s or m.

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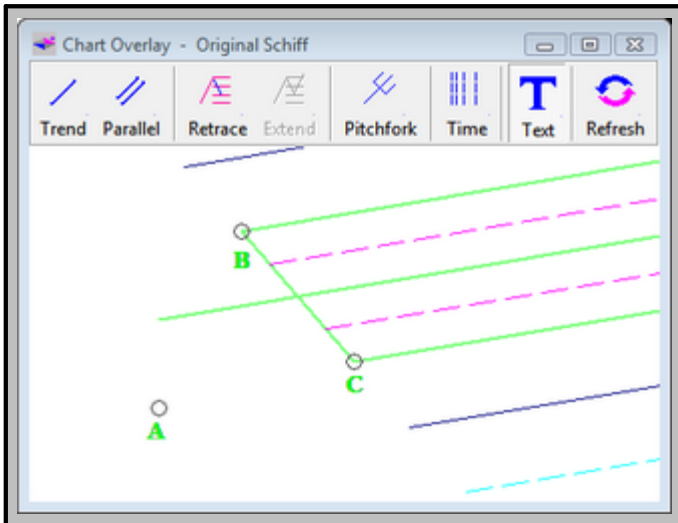
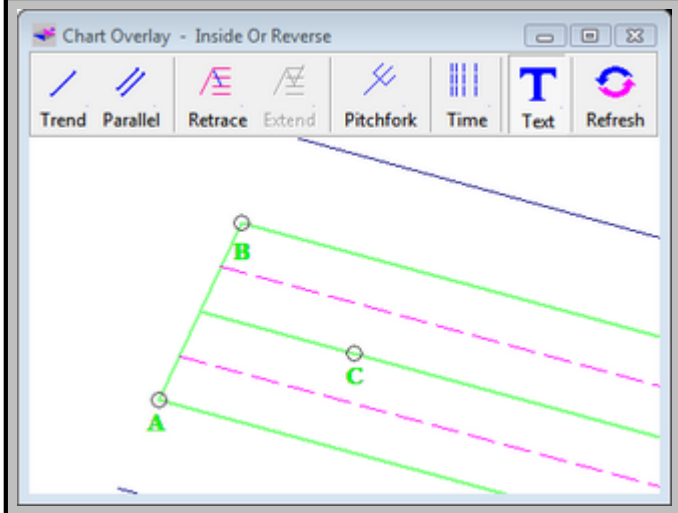


When drawing Original Schiff Median Lines, you again choose three alternating pivot points (high, low, high or low, high, low).

Then ChartOverlay draws a line between B and C.

This time, however, ChartOverlay draws the Median Line from a point directly above A (and at a price half way between A and B) through the midpoint of line BC, which also results in lines with a more gradual slope. (This was Schiff's original idea.)

To switch to this style of Median Lines from any of the others, simply select the item (or point at it) and type o.



When drawing Inside (or Reverse) Median Lines, you again choose three alternating pivot points (high, low, high or low, high, low).

Then ChartOverlay draws a line between A and B (not B and C).

And then, ChartOverlay draws the Median Line from the midpoint of line AB through Point C. This is a technique used by advanced traders under unusual circumstances, and it should not be used without first mastering its theory.

To switch to this style of Median Lines from any of the others, simply select the item (or point at it) and type i or r.

If you like to experiment, you can manually produce your own variation of the standard Pitchfork. To do this, simply ctrl-click on point A and drag it to a new position. As you drag point A, a number will be displayed in the title bar (at the very top of the overlay window).

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This number tells you where A now lies as fraction of the difference in price between A and B. The Standard style is always at [1.00] and the Schiff styles are always at [0.50], but you are free to choose any value you like and also to choose the horizontal position you prefer. You can use this technique to feel out the data and see where you get the best fit.

See Disclaimer.

3.12 Time Cycles

You can use **Time Cycle** studies to identify patterns in the time element of price bars. In the more common types of chart (such as Candlestick and OHLC), price bars display information about both time and price. Each bar displays the important prices that occurred during a specific time period (such as a day, a week, a month, an hour, five minutes, fifteen minutes, etc). When significant changes in price occur at regular intervals, **Time Cycles** provide a way to study that phenomenon, especially when a market has been seen to follow more than one cycle and when multiple cycles indicate significant events at about the same time. See Disclaimer.

Fibonacci vs Fixed

ChartOverlay lets you explore two varieties of **Time Cycles**. **Fixed Time Cycles** have fixed intervals (eg, every 21 bars, or every 89 bars); because all intervals in a **Fixed Time Cycle** item have the same size, the ratio of any interval to its predecessor is 1.0. **Fibonacci Time Cycles** have increasing intervals, where successive intervals are taken from the **Fibonacci Sequence** (1, 1, 2, 3, 5, 8, 13, ...). As the following table shows, from 8 onwards, each new **Fibonacci Time Cycle** interval is approximately 1.6 times greater than its predecessor (eventually settling at 1.618). It is this ratio, not the individual interval sizes, that is of interest for **Fibonacci Time Cycles**.

Line #	1	2	3	4	5	6	7	8	9	10	11		
Interval	0	1	1	2	3	5	8	13	21	34	55		
Distance	0	1	2	4	7	12	20	33	54	88	143		
Ratio			1.000	2.000	1.500	1.667	1.600	1.625	1.615	1.619	1.618		

Line # - a simple sequence number
Interval - the number of bars between this line and its predecessor (the Fibonacci sequence)
Distance - the number of bars between this line and the first line (the sum of the intervals)
Ratio - this interval divided by its predecessor (the Fibonacci ratio)

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Drawing a Time Cycle Item (Standard Method)

When you use the **Standard Method**, you tell ChartOverlay to draw **Time Cycle** lines at certain intervals (either **Fixed** or **Fibonacci**). These intervals will be measured in Price Bars (remember that each Price Bar actually represents both Time and Price).

Begin by pressing the

button or by choosing **Time Cycles** from the menu.

Then choose either **Fibonacci** or **Fixed** in the dialog box that appears. If you choose **Fixed**, you must also specify the length of your interval (ie, the number of price bars in each cycle). If you choose **Fibonacci**, the interval sizes will be determined automatically by the Fibonacci Sequence.

Specify a **Calibration Length** (see below).

Select any other options you would like , such as Line Color and Line Style.

- Draw a **Calibration Line**, in response to which ChartOverlay will draw the Cycle Lines.

Calibration Lines

Because ChartOverlay cannot actually see the data in your underlying chart, it cannot count bars unless you give it some help. You can do this by drawing a **Calibration Line** that spans several bars on your chart and by entering the number of bars that were spanned (the **Calibration Length**) in the **Time Cycle** dialog.

ChartOverlay uses these two items, the **Calibration Length**, which is given in bars, and the **Calibration Line**, which can be measured in screen pixels, to determine the width of a single bar (including the space separating it from its neighbor). This can be calculated by dividing the length of the **Calibration Line** by the **Calibration Length**. Given the average width of a single bar (plus spacing), ChartOverlay can then determine the width of N bars. This is analogous to measuring a picket fence by counting pickets.

It is important that the **Calibration Line** begin and end on corresponding points on the first and last bar (eg, both leading edges, or both trailing edges). This ensures that the **Calibration Line** spans exactly N bars and N spaces.

In the following examples **Calibration Lines** A, B and C are valid; line D is not. Note that each of lines A, B and C begins and ends at the same relative position of its beginning and ending bars (left edge, center and right edge, respectively). If the beginning and ending bars have the same width, as appears to be the case here, then Lines A, B and C will each have the same length, which will correspond to the width of 12 bars and the width of 12 spaces. Dividing the length of any of these three lines will yield the average width of one bar and one space. Line D is invalid because it starts at the left edge of one bar and ends at the right edge of another; it is not the same length as the other lines because it spans 13 bars and 12 spaces.

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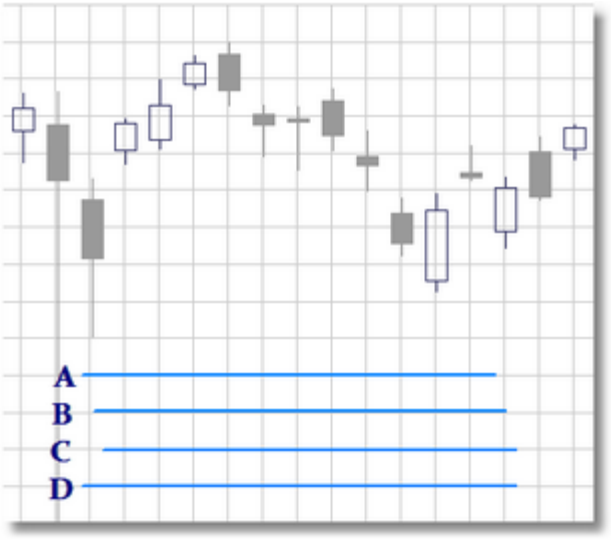

To understand why the **Calibration Length** should be greater than one, consider the following example. Suppose you are looking at a chart that is displaying 100 bars and suppose the width of your chart is 450 pixels. Then each bar (including the spacing between bars) will occupy an average width of 4.5 pixels, which means that most bars will be five pixels wide while about one in ten will be only four pixels wide. Thus, the longer your **Calibration Line**, the more accurate your result (but the more difficult it will be to draw the line).

An Alternate Method

The **Alternate Method** is very similar to the **Standard Method**, except that it does not employ the precision counting of bars. Instead, you let the data dictate what you draw and you do not worry about whether the intervals correspond precisely to bar widths.

As with the **Standard Method**, you draw a **Calibration Line**, but in this case **Calibration Length** is arbitrary (bigger numbers are easier to work with; experiment). Once you have created your **Calibration Line**, you then adjust its end point (ctrl-click the end point and drag it) while watching where the **Time Cycle** lines are drawn as you make the adjustment. Note that you can also ctrl-click and drag the **Calibration Line** to move it and the **Time Cycle** lines together.

You can use this method to feel out the data while looking for cycles. If it happens that the **Calibration Line** touches the two bars at similar points, you can count the bars spanned by the **Calibration Line** and enter that value in the dialog to get accurate numbering. It is more likely, however, that the two bars will be touched at dissimilar points, in which case the numeric labels attached to the cycle lines will be meaningless.

Display

There are several points worth noting in the following example.

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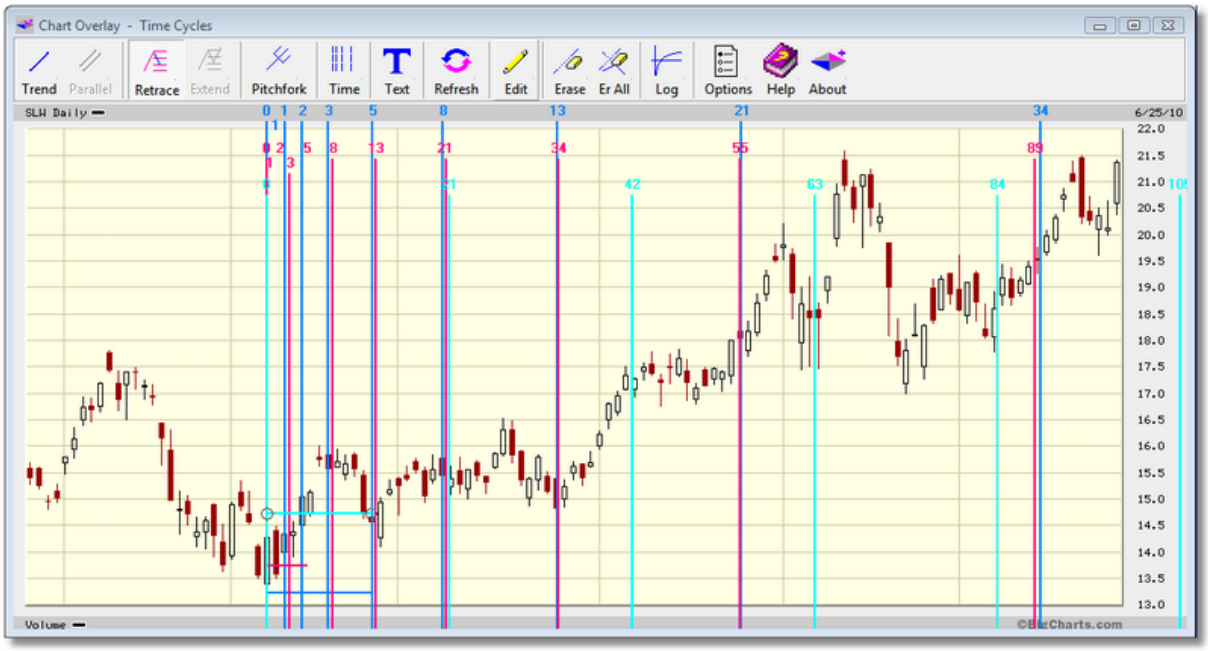

There are three examples of **Time Cycle** items in this chart:

- **Blue** - **Fibonacci Cycles** drawn using the **Standard Method** with a **Calibration Length** of 12. Note that the **Calibration Line** ends at the cycle line labeled 5. This is because 1 + 1 + 2 + 3 + 5 = 12; the label numbers indicate the intervals (the number of price bars) between lines.
- **Red** - **Fibonacci Cycles** drawn using the **Alternate Method**. The length of the **Calibration Line** is not important.
- **Cyan** - **Fixed Cycles** with a **Calibration Length** of 12 and a Cycle Length of 21. There is no relationship between the **Calibration Length** and the Cycle Length. The **Calibration Length** tells ChartOverlay the length (in bars) of the **Calibration Line** and the Cycle Length tells it how many bars to count before drawing a cycle line.

The labels for **Fibonacci Cycle Lines** tell you the distance (in bars) between the line with the label and the line to its left (some lines may be invisible, as described below, but they still affect where subsequent lines are drawn). The labels for **Fixed Cycle Lines** tell you the distance (in bars) from the very first line.

Note that **Time Cycle** labels appear at the top of the window. This is to prevent them from conflicting with the labels for Fibonacci Time Extensions. When one of these numeric labels would overlap another (for example, for the first few **Fibonacci Cycle Lines**), it is offset slightly below its normal position; if a number would require a second offset line, it is simply not displayed. When there is more than one **Time Cycle** item on a chart, each has its own row of labels (or pair of rows), as seen here.

When the space between two cycle lines for the same **Time Cycle** item is too small (less than 10 pixels), the newer line will be invisible, even though its label may be visible. This avoids crowding for the smaller intervals of a **Fibonacci Time Cycle** item. Even though a line is not visible, subsequent lines will be drawn as if the missing line were visible.

Note how often the lines of the two **Fibonacci Time Cycle** items overlap. This occurs because the ratio between consecutive numbers in the Fibonacci sequence tends to be

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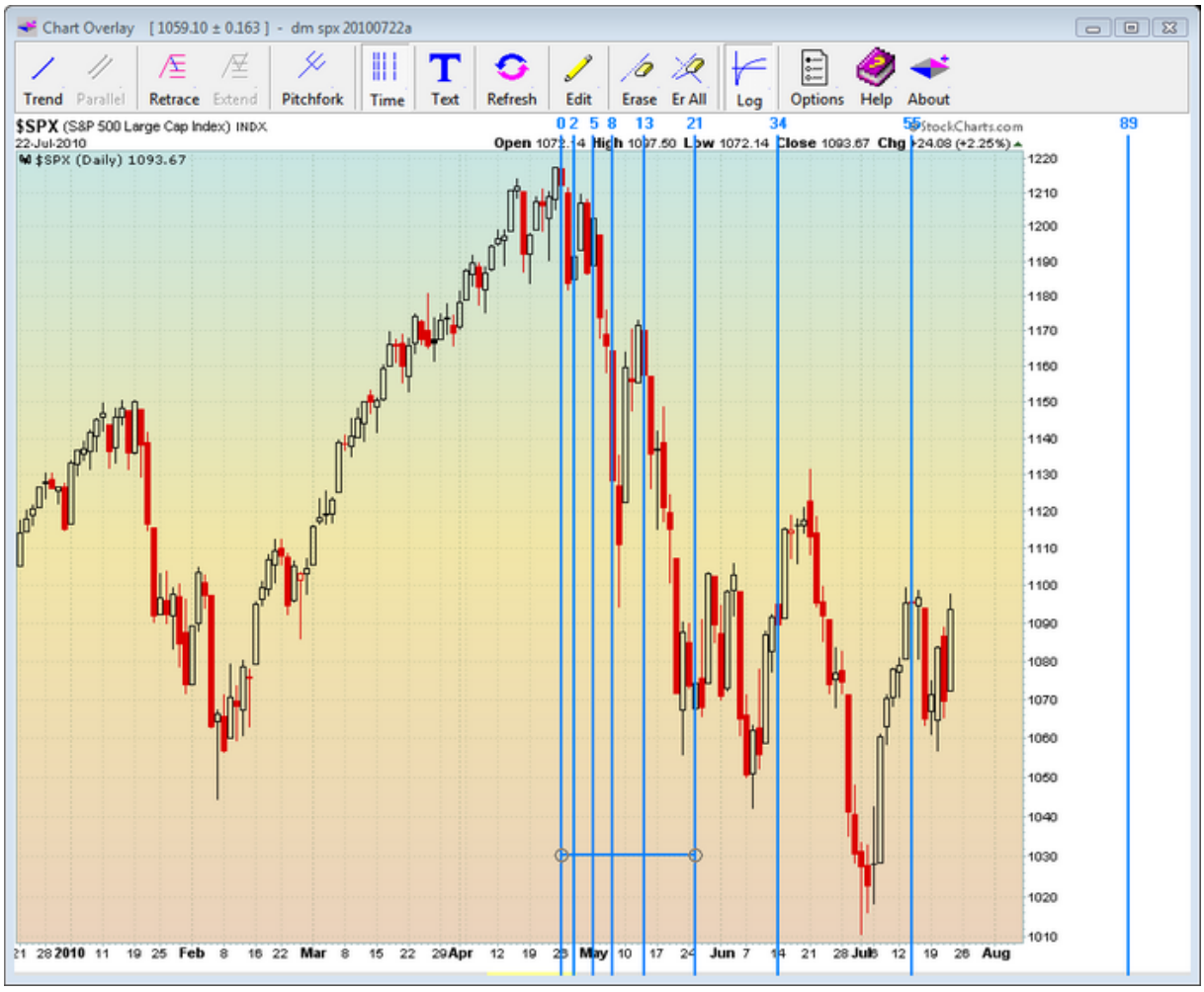
constant (approximately 1.618..., see table above).

Note that when using the **Alternate Method**, when the **Calibration Line** is short (as it is here), it is difficult to exert precise control over the cycle lines to the right. This is because moving the end of the **Calibration Line** by a single pixel may move lines further to the right be several pixels. Using a longer line with a bigger length makes drawing easier; experiment.

Example

This example, created by Don McCullar from Denton, Texas, while using StockCharts.com®, is a simplified version of an example presented in a previous section. Note how the Fibonacci Time Cycles often coincide with reversals in the price chart. The **Calibration Line** runs from 4/26 to 5/25, which represents 21 trading days (not counting 4/26 itself). Using this line in conjunction with a **Calibration Length** of 21 yields a series of lines at the distances indicated by the Fibonacci sequence.



3.13 Text

The Text drawing tool allows you to annotate any chart you are studying. Each text item you create can have whatever text, font, style, size and color you prefer.

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To add Text to your chart, press the

button, or choose **Text** from the menu. Enter the Text you want to display and click the Format button to choose options. Then use the mouse to create a rectangle to contain your text (the bottom is ignored if the text will not fit in the rectangle you provide).

4 Dialogs

There are several dialogs in ChartOverlay. They are described in the following pages.

In any of the dialogs, if you want to know about anything you see, **point at it and you will receive a brief description**. In many cases this will be all you need.

Each of the dialogs that controls one of the drawing tools has two versions. The **longer version** contains all of the options available for that tool. The **shorter version** contains only the more commonly used options but is typically much smaller so that it doesn't cover up so much of what you are doing.

The following items are common to all of the drawing tools. Click on a link for details (use the* Back *button to return here).

Behavior Options

More Options / Fewer Options

4.1 Trendlines

This dialog allows you to specify the characteristics of any **Trendlines** you wish to draw. It also lets you draw **Speed Resistance Lines** and **Gann Fans**. To draw any of these lines, simply click on one point and drag to another. Each line you draw can be formatted independently.

Each heading below corresponds to one of the option groups in the larger dialog window.

Drawing Options

You can select the **Color** of your **Line** by clicking on the colored square to the left of **Line Color**. You can also change the **Style** used to draw the **Line** to any of the defined values (Normal, Wide, Dashed, Dotted, Dash-Dot, Dash-Dot-Dot or Invisible) using the drop down list to the right of **Line Style**.

If you check **Automatically Extend Using**, your Trendlines will be extended to the edges of the overlay window using the color specified by clicking the colored square on the right. This option is ignored when you enable either **Speed Resistance Lines** or **Gann Fans**; in

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those cases, all lines are extended to the right but not the left.

If you check **Draw Line Bisector**, a short line is drawn perpendicular to the Trendline midway between the two points you used to draw the Trendline. Regardless of whether this item is checked, the **midpoint** is indicated by a third circle when the line is selected.

Speed Resistance Lines

If you check **Enable**, **Speed Resistance Lines** will be drawn automatically when you draw a Trendline.

You can choose a **Line Color** and a **Line Style** in the same way that is described under **Drawing Options** above.

Speed Resistance Lines are normally drawn so that, if a vertical line were drawn from the second point of the Trendline to the Price Level of the first point, that vertical line would be divided into three equal parts. If for some reason you want something different, you can specify your own **Levels**. A negative number will produce a line at a smaller angle than the Trendline (which is how most people use Speed Resistance Lines); a positive number will produce a line at a larger angle.

Gann Fan

If you check **Enable**, a **Gann Fan** will be drawn automatically when you draw a Trendline.

You can choose a **Line Color** and a **Line Style** in the same way that is described under **Drawing Options** above.

W. D. Gann specified the angles at which the fan lines should be drawn and there is no option that allows you to change these angles. Note that ChartOverlay does not draw at exactly the angles specified by Gann. This is because it will be difficult (or impossible) for you to draw the primary Gann line (**1 x 1**) at precisely 45 degrees. Instead, you should draw what you consider to be the **1 x 1** line and the remaining lines will be drawn at the correct **relative** angles. In effect, this allows you to draw the Gann Fan on a chart for which the **X** and **Y** axes have a relationship other than **1:1**, which is the circumstance you are most likely to encounter.

The following items are common to all of the drawing tools. Click on a link for details (use the* Back *button to return here).

Behavior Options

More Options / Fewer Options

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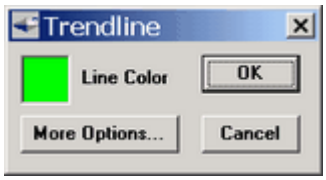

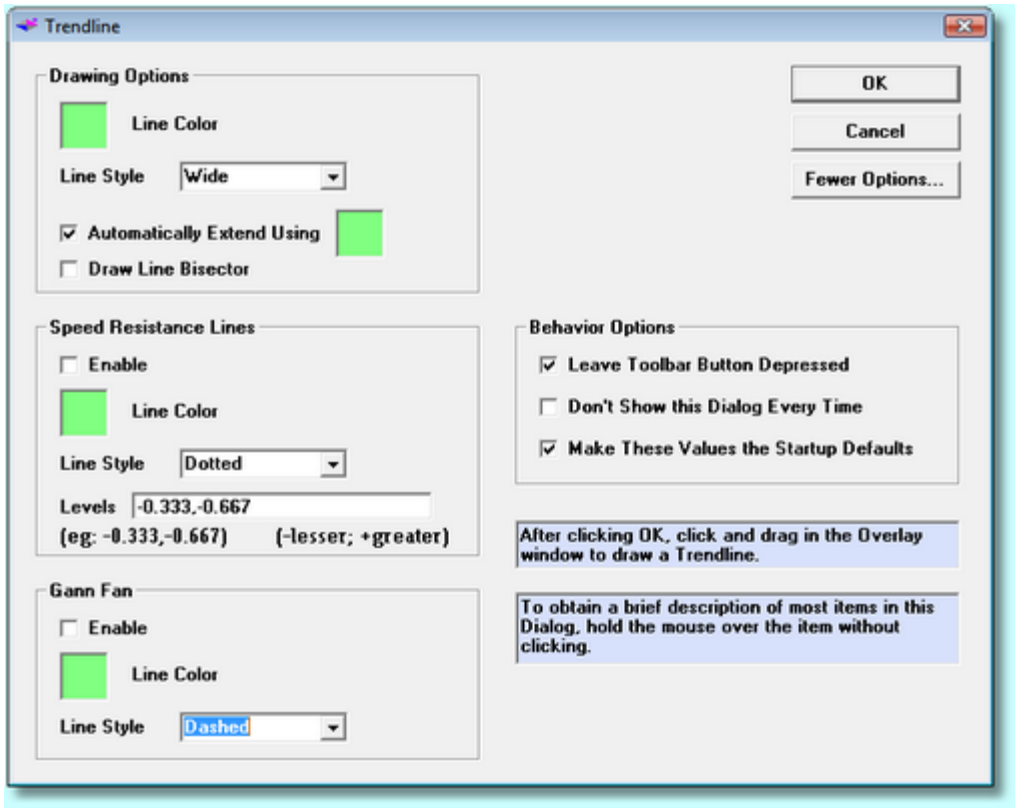

4.2 Parallel Trendlines

Sometimes it is useful to be able to draw a Trendline that is parallel to another line.

Each heading below corresponds to one of the option groups in the larger dialog window.

Drawing Options

You can select the **Color** of your **Line** by clicking on the colored square to the left of **Line Color**. You can also change the **Style** used to draw the **Line** to any of the defined values (Normal, Wide, Dashed, Dotted, Dash-Dot, Dash-Dot-Dot or Invisible) using the drop down list to the right of **Line Style**.

If you check **Automatically Extend Using**, your Trendlines will be extended to the edges of the overlay window using the color specified by clicking the colored square on the right.

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Action/Reaction Lines

If you choose **One Reaction Line for each Action Line**, when you create a parallel on either side of your reference line, a second parallel will be drawn on the other side of the reference line at an equal distance.

If you choose **Many Reaction Lines for each Action Line**, when you create a parallel on either side of your reference line, many parallel lines will be drawn on the other side of the reference line using a spacing equal to the distance of the first parallel from the reference line.

These lines can be adjusted by Ctrl-clicking and dragging them.

The following items are common to all of the drawing tools. Click on a link for details (use the* Back *button to return here).

Behavior Options

More Options / Fewer Options

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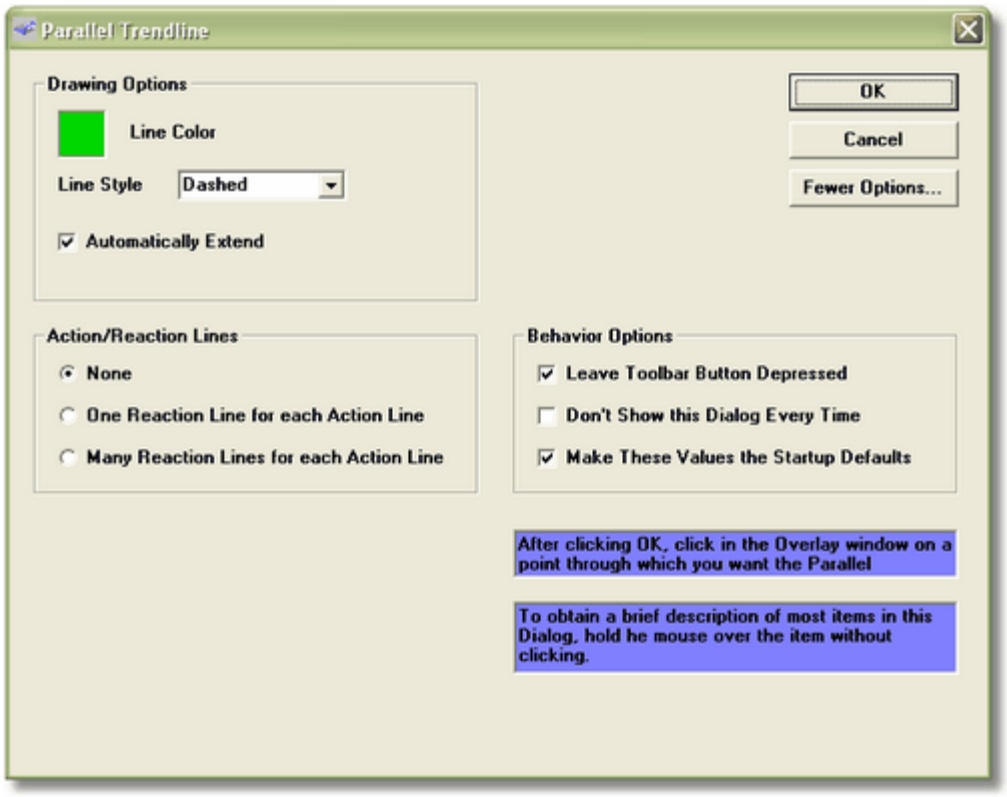
Parallel Trendline
Drawing Options
Line Color
Line Style
Dashed
Automatically Extend
OK
Cancel
Fewer Options...
Action/Reaction Lines
None
One Reaction Line for each Action Line
Many Reaction Lines for each Action Line
Behavior Options
Leave Toolbar Button Depressed
Don't Show this Dialog Every Time
Make These Values the Startup Defaults
After clicking OK, click in the Overlay window on a point through which you want the Parallel
To obtain a brief description of most items in this Dialog, hold he mouse over the item without clicking.

4.3 Fibonacci Retracements

This dialog lets you specify the characteristics of the **Fibonacci Lines** you wish to draw. Note that when you draw the line that defines the price movement, you should start with the earlier date.

Each heading below corresponds to one of the option groups in the larger dialog window.

Prices

There are three reasons for which you might want to enter **Prices**. They are required for **Logarithmic Scaling** and for calculating an extension as a **Percentage** of the prior Retracement (see **Fibonacci Price Extensions** under **Dialogs** for more information). You may also want to have ChartOverlay calculate the prices associated with the Fibonacci Levels.

If you have already entered prices for another object, you can ask ChartOverlay to **Automatically Calculate Prices**. Be careful, however. The calculated prices will be approximate. This is because the points you can specify with the mouse are actually **Pixels**, which have a width and a height. Depending on the price scale at the right of your chart, **each pixel actually represents a range of prices**. While ChartOverlay does its best to

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figure out what you mean, there is no guarantee that it will choose the correct price from among many possibilities.

You can also **Specify Prices** yourself (the only choice if no price information is available yet). In this case, **First** corresponds to the beginning of the line that you drew and **Second** corresponds to the end.

Fibonacci Options

The Fibonacci Levels button lets you specify which **Retracement Levels** you want to see. You can choose standard levels or you can enter your own.

Choose **End of this Move** if you wish to see Fibonacci Levels tacked onto the end of this move. If you choose this option the Fibonacci Levels button will let you specify Extension Levels as well as Retracement Levels.

Choose **End of Retracement** if you want to specify Fibonacci Extensions later in a separate operation. In this case you will select a point below the end of this move as the starting point for calculating extensions.

Drawing Options

You can select the **Color** of your **Lines** by clicking on the colored square to the left of **Lines**. To select the **Color** of your **Numbers** click on the colored square to the left of **Numbers**.

You can also change the **Style** used to draw lines to any of the defined values (Normal, Wide, Dashed, Dotted, Dash-Dot, Dash-Dot-Dot or Invisible). To change the style of the line that you draw use the drop down list to the right of **Price Movement Line Style**. To change the style of the horizontal lines that ChartOverlay will draw to indicate the Fibonacci Levels use the drop down list to the right of **Fibonacci Line Style**.

If you are drawing several Fibonacci grids, you may not want your horizontal Fibonacci Level lines to extend all the way across your chart. If this is so, you can specify a **Fibonacci Line Length** indicating the length (in inches) that you prefer.

Choose **Left** or **Right** to indicate at which end of the Fibonacci Level lines you want ChartOverlay to **Draw Numbers** (or choose **Neither** if you don't want numbers).

Enable

You can ask ChartOverlay to draw any combination of four types of Fibonacci Lines based upon the time/price movement that you drew:

- Fibonacci Price Retracements
- Fibonacci Fans
- Fibonacci Arcs
- Fibonacci Time Extensions

Fan and Arc Options

For each of the **Fan**, **Arc** and **Price** studies, you can choose a **Color** and a **Style**. You can

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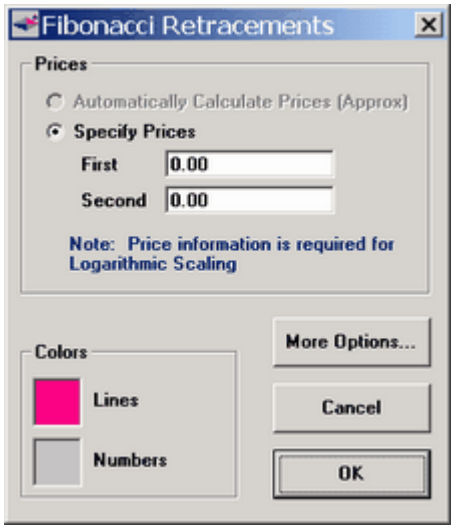
also choose the Fibonacci **Levels** you want for that study.

For **Price Retracements**, use **Drawing Options** (above) to select Price and Color and Use **Fibonacci Options** (above) to select Levels.

The following items are common to all of the drawing tools. Click on a link for details (use the* Back *button to return here).

Behavior Options

More Options / Fewer Options



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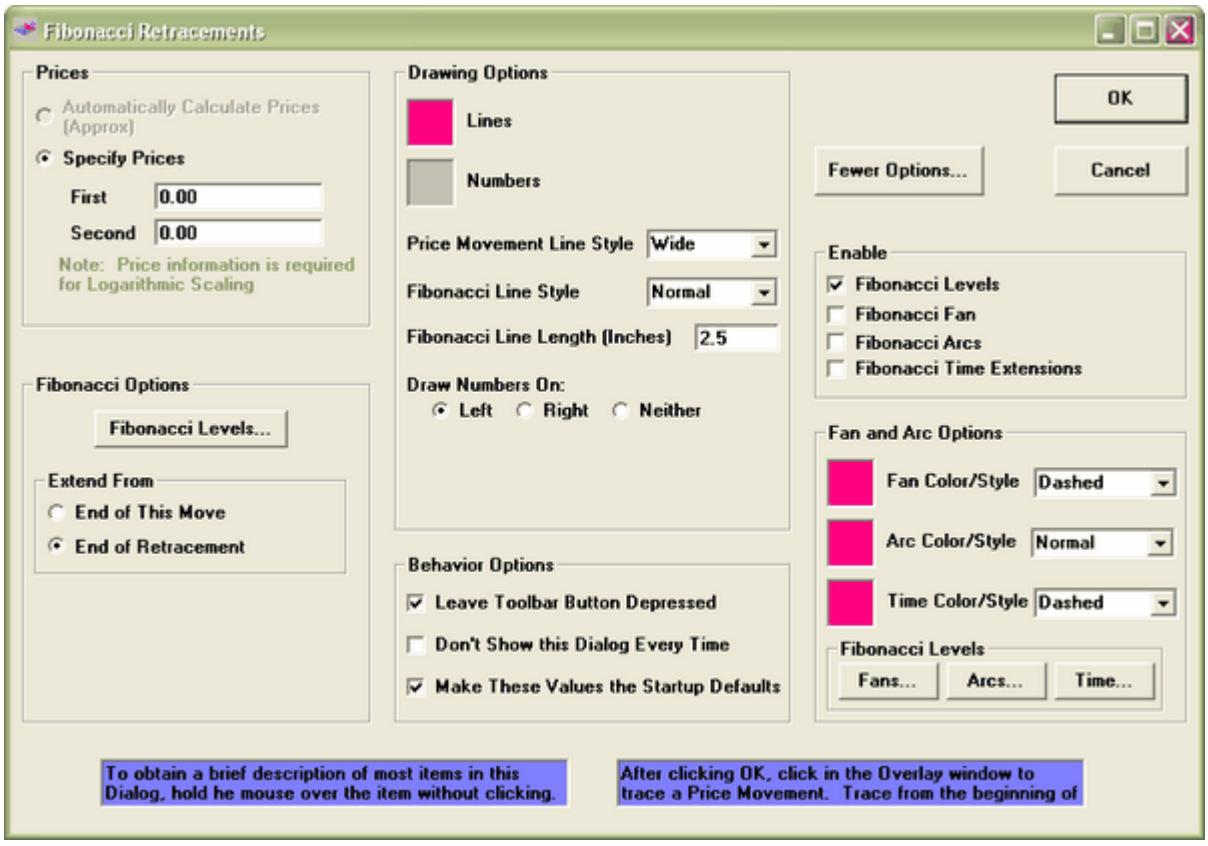

4.4 Fibonacci Price Extensions

There are several ways to draw **Fibonacci Price Extensions** (see **Fibonacci Price Extensions** under **Studies** for more information). Based on parameters you specify, ChartOverlay will draw a parallel line corresponding to a **1.0 Extension** of the first move. It will also draw the Extension Levels you request.

Each heading below corresponds to one of the option groups in the larger dialog window.

Prices

There are three reasons for which you might want to enter **Prices**. They are required for **Logarithmic Scaling** and for calculating an extension as a **Percentage** of the prior Retracement (see below). You may also want to have ChartOverlay calculate the prices associated with the Fibonacci Levels.

If you have already entered prices for another object, you can ask ChartOverlay to **Automatically Calculate Prices**. Be careful, however. The calculated prices will be approximate. This is because the points you can specify with the mouse are actually **Pixels**, which have a width and a height. Depending on the price scale at the right of your chart, **each pixel actually represents a range of prices**. While ChartOverlay does its best to

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figure out what you mean, there is no guarantee that it will choose the correct price from among many possibilities.

You can also **Specify Prices** yourself (the only choice if no price information is available yet). In this case, **First** corresponds to the beginning of he line that you drew and **Second** corresponds to the end. When you specify **First**, **Second** will be calculated automatically.

Fibonacci Options

The Fibonacci Levels button lets you specify which **Extension Levels** you want to see. You can choose standard levels or you can enter your own.

Choose **Same Percentage** if you want the extension to move by the same percentage as the original (eg, if you had a move from 15 to 20 and a pullback to 18, the end of the extension would be 24, representing a 33% move from 18). You need prices to choose this option.

Choose **Same Delta** if you want the extension to move by the same amount as the original (eg, if you had a move from 15 to 20 and a pullback to 18, the end of the extension would be 23, representing a 5 point move from 18).

Drawing Options

You can select the **Color** of your **Lines** by clicking on the colored square to the left of **Lines**. To select the **Color** of your **Numbers** click on the colored square to the left of **Numbers**.

You can also change the **Style** used to draw lines to any of the defined values (Normal, Wide, Dashed, Dotted, Dash-Dot, Dash-Dot-Dot or Invisible). To change the style of the extension line use the drop down list to the right of **Price Movement Line Style**. To change the style of the horizontal lines that ChartOverlay will draw to indicate the Fibonacci Levels use the drop down list to the right of **Fibonacci Line Style**.

If you are drawing several Fibonacci grids, you may not want your horizontal Fibonacci Level lines to extend all the way across your chart. If this is so, you can specify a **Fibonacci Line Length** indicating the length (in inches) that you prefer.

Choose **Left** or **Right** to indicate at which end of the Fibonacci Level lines you want ChartOverlay to **Draw Numbers** (or choose **Neither** if you don't want numbers).

Check **Connect To Prior Move** if you want to connect this Extension to the movement it is based on. This creates a three-wave line.

If you are drawing an extension near the right edge of your window, you can save space by checking **Draw Extensions Vertically**. If this option is not checked, the extension line will be drawn parallel to the original move.

The following items are common to all of the drawing tools. Click on a link for details (use the* Back *button to return here).

Behavior Options

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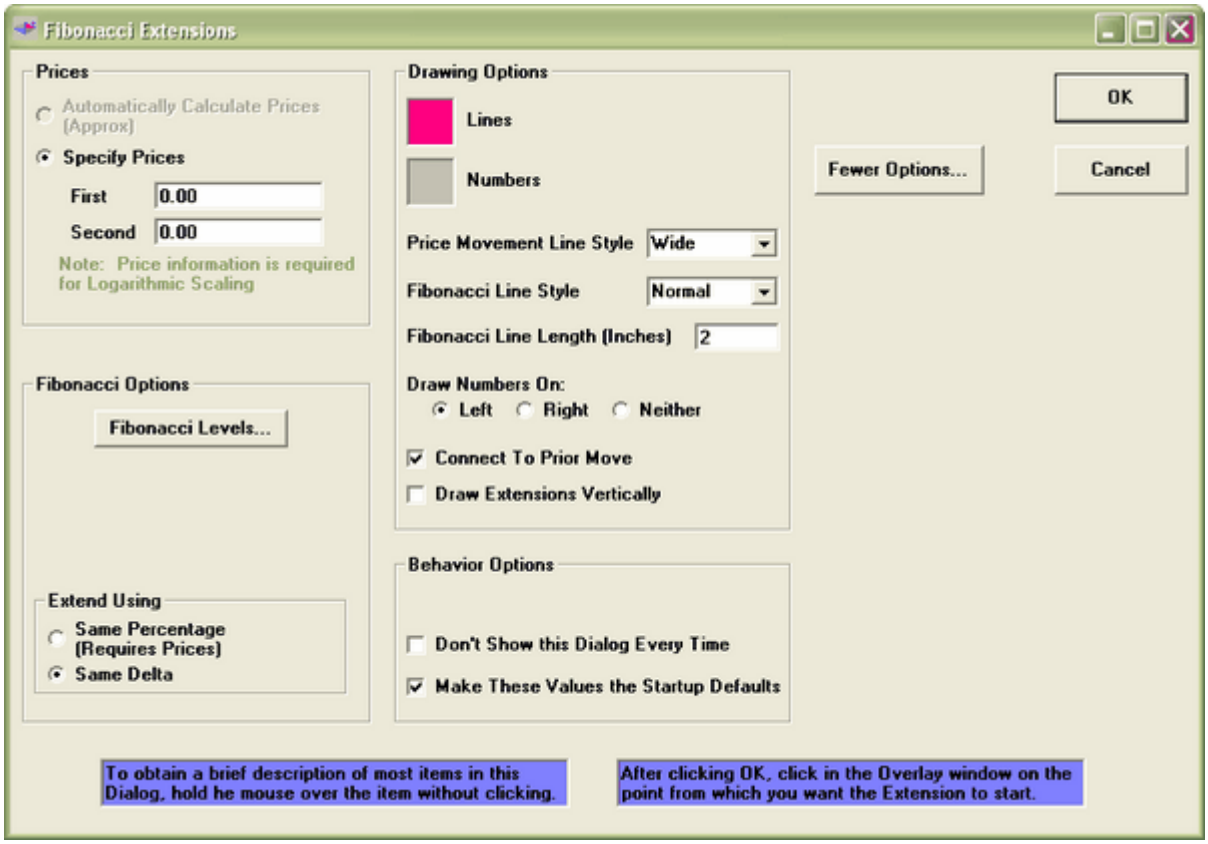
More Options / Fewer Options



4.5 Andrews' Pitchforks

This dialog allows you to control the appearance of you **Median Lines** (the **Pitchfork**). It also lets you choose which of various **secondary** lines will be drawn and what they will look

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like. The Pitchfork is **defined** by three **points** (**A**, **B** and **C**) that correspond to significant alternating highs and lows on your chart. They should be selected in chronological order (earliest to latest).

Each heading below corresponds to one of the option groups in the larger dialog window.

Additional Lines

For each of the secondary lines, you can select the **Color** by clicking on the colored square to the right of the name(s). You can change the **Style** to any of the defined values (Normal, Wide, Dashed, Dotted, Dash-Dot, Dash-Dot-Dot or Invisible) using the drop down list to the right of the color square.

Level 1 Upper refers to a parallel line drawn above the **Upper Median Line** at a distance equal to the distance between the upper and central median lines. **Level 1 Lower** is similar except that it is drawn below the **Lower Median Line**. The **Level 2** lines are similar to the Level 1 Lines but are drawn at twice the distance. These lines are called **Warning Lines**.

You can draw any **Additional Warning Lines** you want by specifying a multiple of the distance between the upper and central median lines. **Positive** multiples will cause lines to be drawn between the upper and central median lines the central median; **negative below**. After you have draw an Andrews item, **you can adjust any of the Warning Lines** by Ctrl-clicking and dragging them. If you have checked **Remove Fibonacci Levels by Ctrl-Checking on Them** on the **Fibonacci** tab of the **Options** dialog, you can easily remove unwanted Warning Lines you have drawn by holding down the Ctrl key and clicking on the lines you do not want.

You can also add temporary **Warning Lines** by using the **Parallel Trendline** tool or by using the **Draw Parallel Trendline Here** item from the menu. Simply select the **Pitchfork** and create the **Parallel**. The new **Parallel** will be drawn as a **Warning Line** (unless you have chosen **Automatically Extend** in the **Parallel** dialog).

Reaction Lines are lines drawn parallel to the **Base** of the Pitchfork (the line connecting the three median lines; it also connects the second and third defining points of the Pitchfork). The length of the **Handle** of the Pitchfork is used for spacing the reaction lines.

Trigger Lines are drawn from the first defining point (**A**) through the other two defining points (**B** and **C**).

A **Pivot Zone** is a rectangle whose left edge is at point **C** and whose width is the greater of **C - B** and **B - A** (top and bottom are not significant).

Drawing Options

You can select the **Color** of your **Median Lines** by clicking on the colored square to the left of **Line Color**. You can also change the **Style** used to draw the **Median Lines** to any of the defined values (Normal, Wide, Dashed, Dotted, Dash-Dot, Dash-Dot-Dot or Invisible) using the drop down list to the right of **Line Style**.

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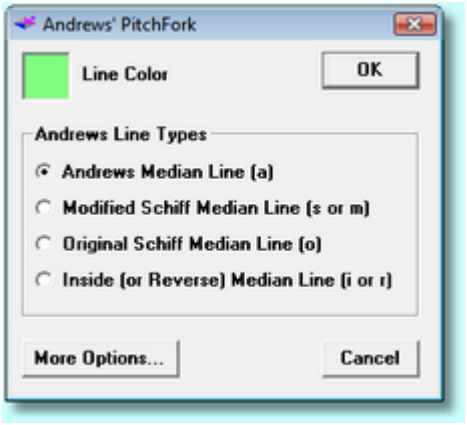
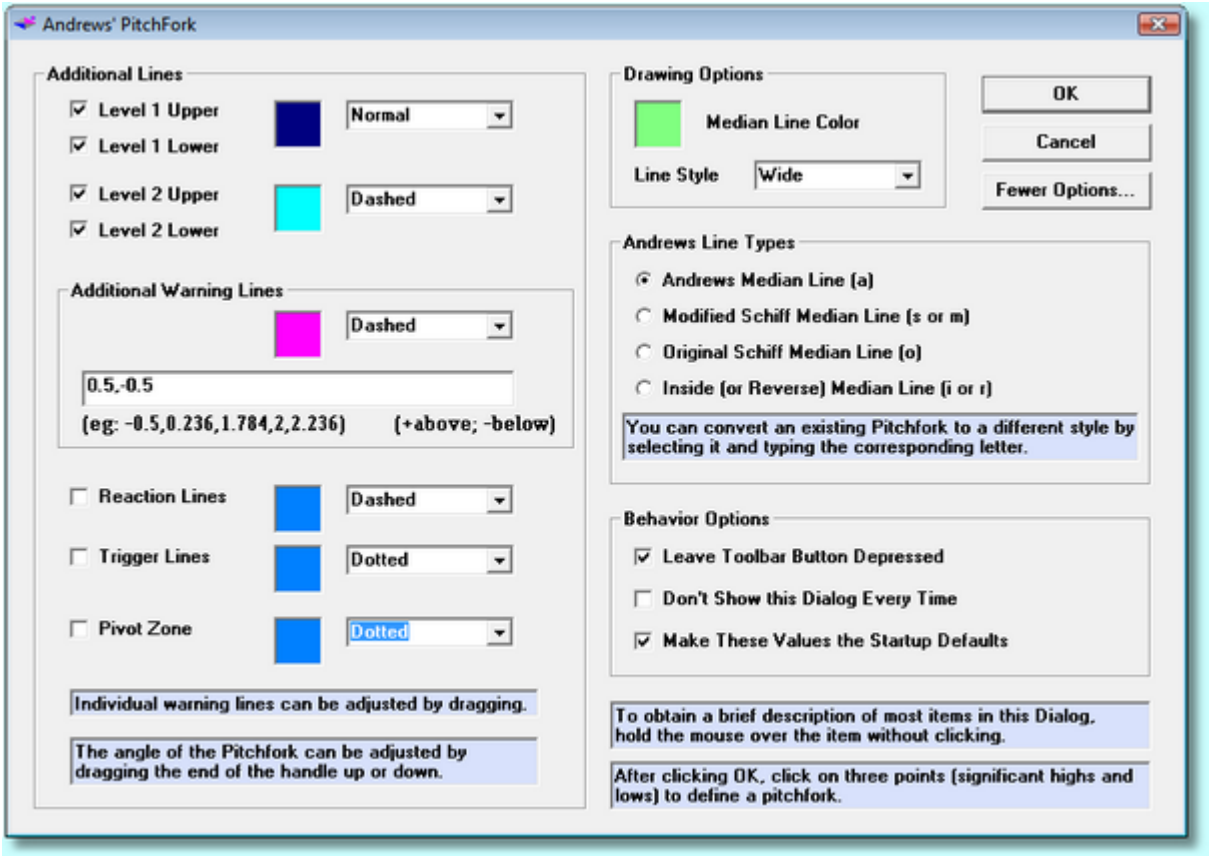
The following items are common to all of the drawing tools. Click on a link for details (use the* Back *button to return here).

Behavior Options

More Options / Fewer Options




Andrews' PitchFork
Additional Lines
Level 1 Upper
Level 1 Lower
Level 2 Upper
Level 2 Lower
Normal
Dashed
Additional Warning Lines
Dashed
0.5,-0.5
(eg: -0.5,0.236,1.784,2,2.236)
(+above; -below)
Reaction Lines
Dashed
Trigger Lines
Dotted
Pivot Zone
Dotted
Individual warning lines can be adjusted by dragging.
The angle of the Pitchfork can be adjusted by dragging the end of the handle up or down.
Drawing Options
Median Line Color
Line Style
Wide
OK
Cancel
Fewer Options...
Andrews Line Types
Andrews Median Line (a)
Modified Schiff Median Line (s or m)
Original Schiff Median Line (o)
Inside (or Reverse) Median Line (i or r)
You can convert an existing Pitchfork to a different style by selecting it and typing the corresponding letter.
Behavior Options
Leave Toolbar Button Depressed
Don't Show this Dialog Every Time
Make These Values the Startup Defaults
To obtain a brief description of most items in this Dialog, hold the mouse over the item without clicking.
After clicking OK, click on three points (significant highs and lows) to define a pitchfork.

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4.6 Time Cycles

Most of the studies provided by ChartOverlay deal with the Price axis. These studies deal with the **Time** axis.

Each heading below corresponds to one of the option groups in the larger dialog window.

Drawing Options

Choose either **Fibonacci Time Cycles** or **Fixed Time Cycles**. Fibonacci Time Cycles are also called **Fibonacci Time Zones**.

With **Fibonacci** Time Cycles, vertical lines will be drawn at increasing intervals. These intervals are based on the Fibonacci Numbers.

Fixed Time Cycles will be drawn at regular intervals. They are represented by semi-circles. Their size is specified in the edit box to the right of **Fixed**.

Because ChartOverlay cannot actually see the bars on the chart you are studying, you must give it the information needed to draw the time cycles accurately. This information has two key elements. One element is the horizontal line you will draw. This line will indicate two things: the starting point for the cycles and a length. The second element is the **Calibration Length**, which tells ChartOverlay haw many bar widths are represented by the length of your line. ChartOverlay will use this to calculate an average bar width. Stating the Calibration Length is similar to describing the length of a fence; whereas 10 sections of fence require 11 fence posts, a Calibration Length of 10 requires 11 bars. It is important that the line you draw begin and end at the same point in the first and last bar (eg, center to center or left edge to left edge). If the chart you are studying has a large number of closely-packed bars, you should increase the Calibration Length accordingly so that an accurate average can be determined.

You can select the **Color** of your **Lines** by clicking on the colored square to the left of **Line Color**. You can also change the **Style** used to draw the **Lines** to any of the defined values (Normal, Wide, Dashed, Dotted, Dash-Dot, Dash-Dot-Dot or Invisible) using the drop down list to the right of **Line Style**.

The following items are common to all of the drawing tools. Click on a link for details (use the* Back *button to return here).

Behavior Options

More Options / Fewer Options

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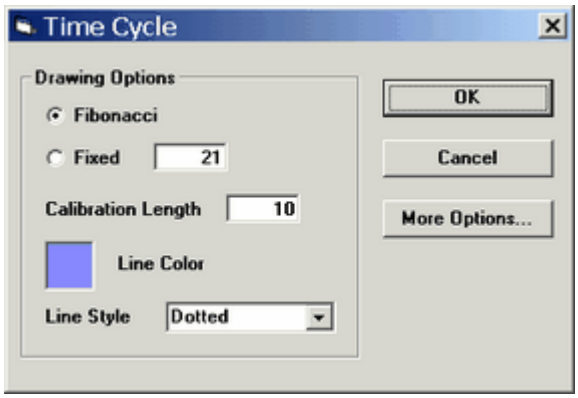

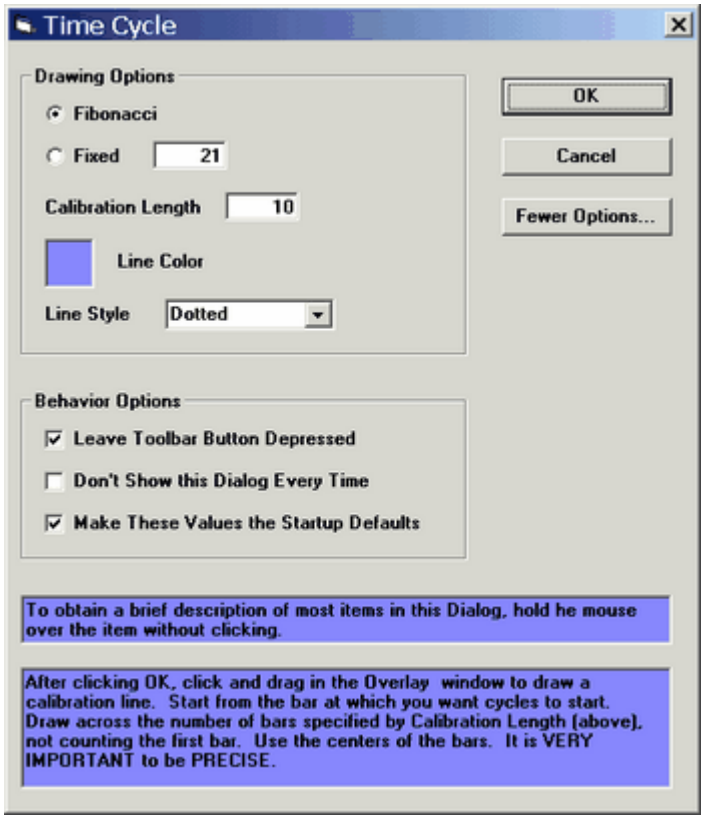
Time Cycle
Drawing Options
Fibonacci
Fixed
21
Calibration Length
10
Line Color
Line Style
Dotted
OK
Cancel
Fewer Options...
Behavior Options
Leave Toolbar Button Depressed
Don't Show this Dialog Every Time
Make These Values the Startup Defaults
To obtain a brief description of most items in this Dialog, hold he mouse over the item without clicking.
After clicking OK, click and drag in the Overlay window to draw a calibration line. Start from the bar at which you want cycles to start. Draw across the number of bars specified by Calibration Length (above), not counting the first bar. Use the centers of the bars. It is VERY IMPORTANT to be PRECISE.

4.7 Text

You can use individually formatted blocks of text to annotate your charts.

Each heading below corresponds to one of the option groups in the larger dialog window.

Text Options

Type the **Text** you want to display in the large edit box. Click the **Font** button to choose the Font, Style, Size and Color you want.

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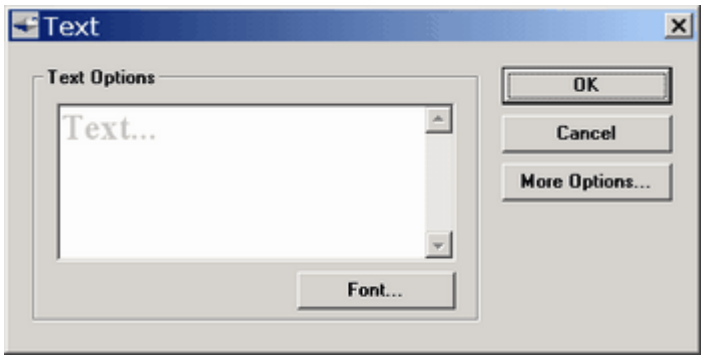
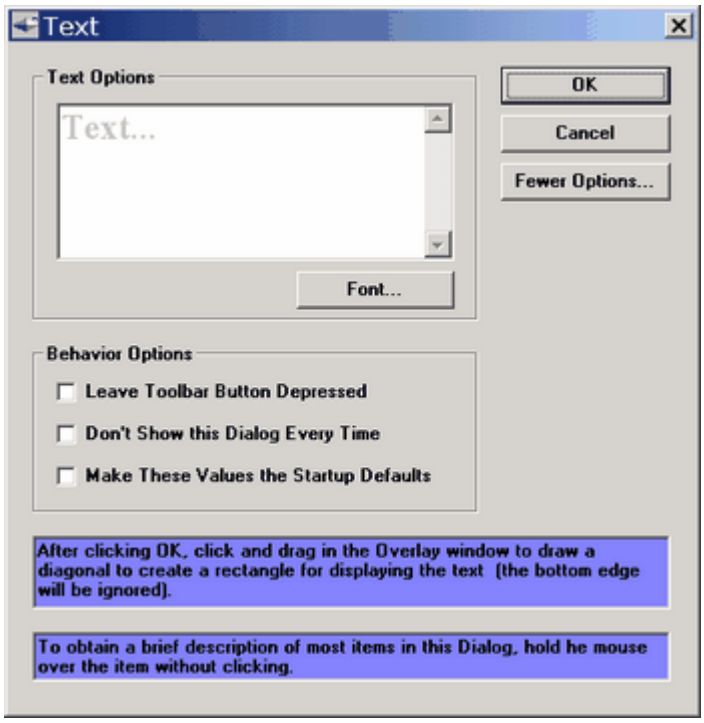
The following items are common to all of the drawing tools. Click on a link for details (use the* Back *button to return here).

Behavior Options

More Options / Fewer Options




Text
Text Options
Text...
Font...
OK
Cancel
Fewer Options...
Behavior Options
Leave Toolbar Button Depressed
Don't Show this Dialog Every Time
Make These Values the Startup Defaults
After clicking OK, click and drag in the Overlay window to draw a diagonal to create a rectangle for displaying the text (the bottom edge will be ignored).
To obtain a brief description of most items in this Dialog, hold he mouse over the item without clicking.

4.8 Fibonacci Levels

Depending on which button you clicked to make this dialog appear, it allows you to select the levels you wish to see for the various Fibonacci features.

Here are some examples, both of which show **both Retracements** and **Extensions**. More examples are available elsewhere.

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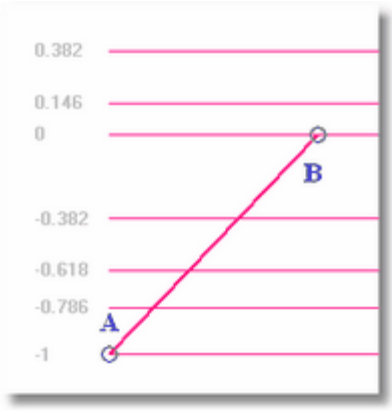

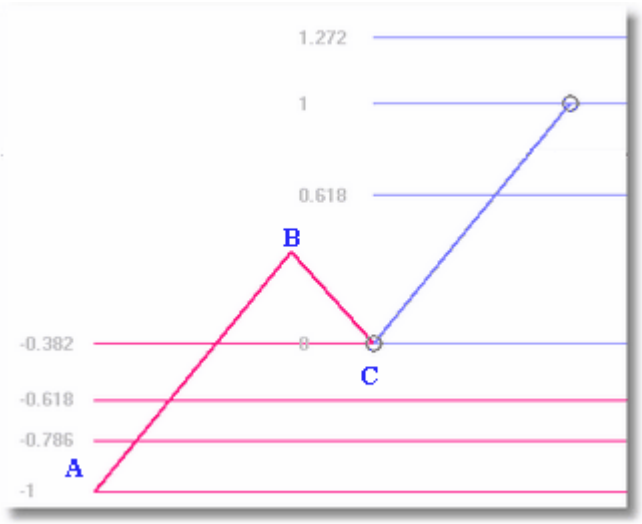

Note the use of positive and negative numbers to distinguish between Retracements and Extensions.

- Because **Retracement Levels** represent a correction (or retreat) they are drawn with **negative values**, starting from the end of your move (B) and going back towards (and perhaps past) the beginning (A).
- Because **Extension Levels** represent a continuation (or advance) they are drawn with **positive values**, starting either from the end of your move (B), or from the point designating the beginning of the **Extension** (C), and going away from the beginning (A).

This dialog lets you specify as many levels as you might want. In any specific case, however, many of those levels will be irrelevant to you. If you have checked **Remove Fibonacci Levels by Ctrl-Checking on Them** on the **Fibonacci** tab of the **Options** dialog, you can easily remove unwanted levels for a **Retracement** or **Extension** you have drawn by holding down the Ctrl key and clicking on the lines you do not want.

Each heading below corresponds to one of the option groups in the larger dialog window.

Retracement

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This section allows you to select any of several standard Fibonacci **Retracement** levels for the type of lines you wish to draw (simple Retracements, Fibonacci Fans or Fibonacci Arcs).

Extension

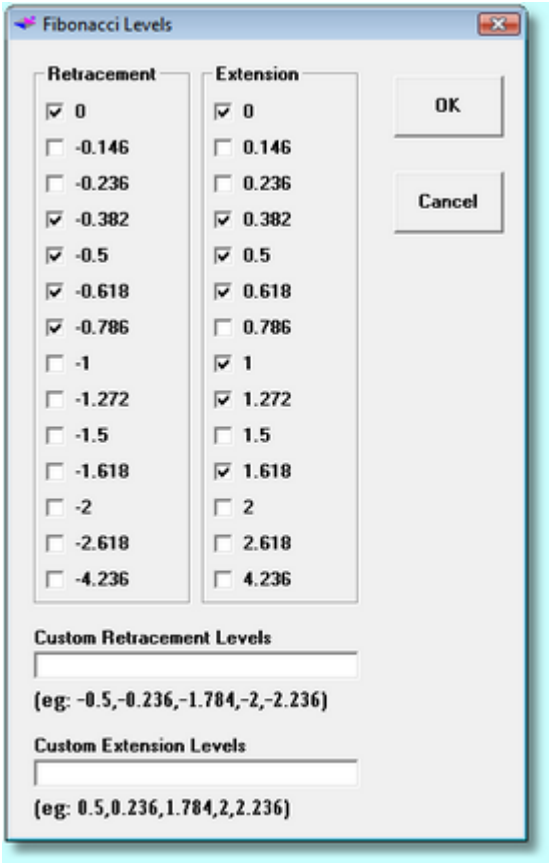
This section allows you to select any of several standard Fibonacci **Extension** levels for the type of lines you wish to draw (simple price extensions, simple time extensions, Fibonacci Fans or Fibonacci Arcs).

Custom Retracement Levels

If you want a **Retracement** Level that doesn't appear in the list above, you can add it here. **Retracement numbers should be negative.** If you want more than one number, **separate** them **with commas**.

Custom Extension Levels

If you want an **Extension** Level that doesn't appear in the list above, you can add it here. **Extension numbers should be positive.** If you want more than one number, **separate** them **with commas**.



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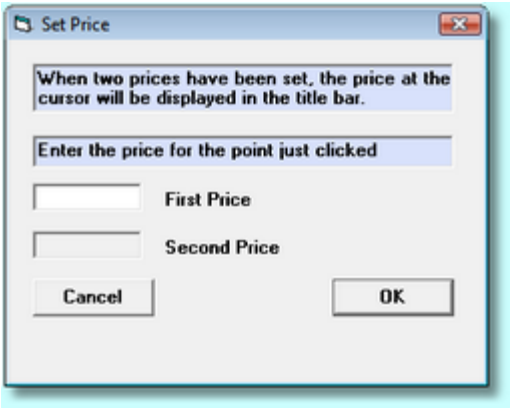
4.9 Set Price

When you choose Set Price Here from the menu, this dialog will appear. Depending on whether you have already entered one price, **First Price** or **Second Price** will be enabled.

Once two prices have been entered, the price corresponding to the cursor will be displayed in the title bar.


Set Price
When two prices have been set, the price at the cursor will be displayed in the title bar.
Enter the price for the point just clicked
First Price
Second Price
Cancel
OK

4.10 Options

The **Options** dialog allows you to modify several key elements of program behavior.

Each heading below corresponds to one of the tabs in the dialog window.

General

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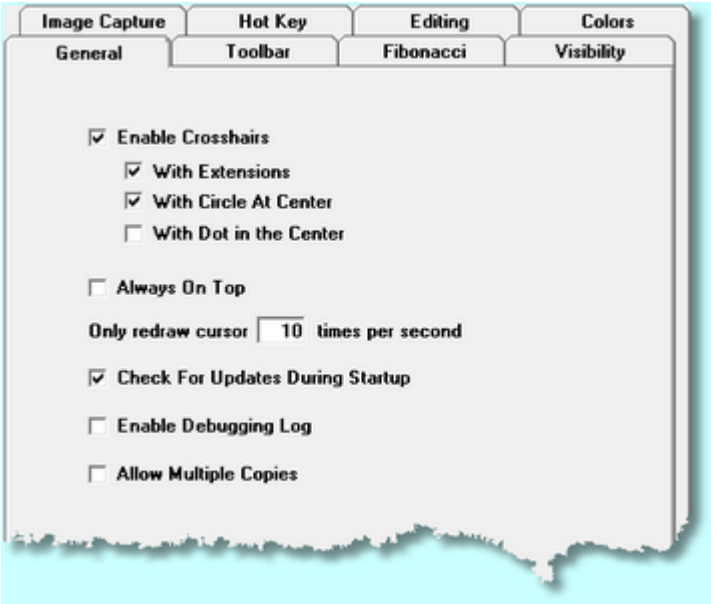

ChartOverlay has a **crosshair** cursor that lets you make precise drawings. If you check **With Extensions**, the crosshairs will extend to the edges of the overlay window; and you can use them to compare data at different points in the window. If you prefer not to have crosshairs, you can uncheck the **With Extensions** or the **Enable Crosshairs** option. You can use the Menu to choose between a **Cross** and an **Arrow** if you prefer not to use crosshairs.

To make it easier to see the data over which you are trying to position the cursor, you can replace the center of the crosshairs with a **circle** with a radius of 5 pixels. With the circle enabled, you can either sight along the lines of the crosshair to determine your position or you can request a **dot in the center** of the crosshairs.

The crosshairs are drawn by inverting the colors of the points in the background; although this changes the colors of the background data, it does not cover the data.

In order to keep cursor movement as smooth as possible, the cursor is contracted when it is moving rapidly. However, when you slow down, the crosshairs again extend to the edges of the window.

Choosing **Always on Top** will keep the overlay visible and on top of your chart even when you are working with the chart. This can be helpful if you are changing symbols or time frames. For example, you might want to draw a Retracement or a Trendline for one symbol and then overlay that drawing on another symbol. If the overlay is in the way (eg, if you want to click on something behind the overlay), you can hide it temporarily using the Hot Key (see below).

The **Check For Updates During Startup** option allows you to request that ChartOverlay interrogate the Omnium Software web site each time you start the program. If this item is checked, you will be notified when a new version is available.

A very small number of users have reported a **"sticky" cursor** meaning that the cursor lags behind their mouse or trackpad motions. This may be caused by an out-of-date driver (check

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you manufacturer's website for updates). If you experience this, try unchecking the **With Extensions** option or the **Enable Crosshairs** option. You can also adjust **Only redraw cursor *o* times per second**; if a value other than zero is used, the rate at which the cursor is redrawn will be reduced, giving your processor a better chance to keep up; try a value of 10 or 20. Another possibility is to modify the **Visibility** options (below).

Enable Debugging Log should be left unchecked unless you have experienced program crashes or unless you have been asked by Omnium Software Support to turn it on.

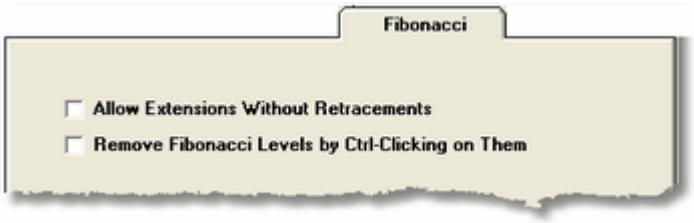
Checking **Allow Multiple Copies** makes it possible to have more than one overlay window.

Toolbar

Text on Buttons puts a small text label on each Toolbar button, making it easier to recognize. Having this text makes the toolbar wider and taller, however, so you may wish to turn it off to save space. If you do not have the text visible, you can point at any of the buttons briefly to get a popup window with a brief description of what the button does.

Hide Toolbar makes the toolbar completely invisible, making more of the background window visible. If you choose to hide the toolbar, you can use the right-click Menu to access any of the toolbar functions.

Fibonacci



If you check **Allow Extensions Without Retracements**, you do not need to draw (or select) a Retracement before you can draw an Extension. Instead the **Extend** button is always enabled and you can draw a **Retracement/Extension** pair simply by placing three points on the overlay. The first two points represent an initial move; the third represents a **Retracement (Correction)** of that move. A more complete description is available here.

If you have requested more Fibonacci levels than you actually need, you can easily remove unwanted levels for a **Retracement** or **Extension** you have drawn by holding down the Ctrl key and clicking on them if you have checked the **Remove Fibonacci Levels by Ctrl-Checking on Them** option here. If you also hold down the **Alt** key, ChartOverlay will remove all **Retracement** (or **Extension**) levels for the selected item

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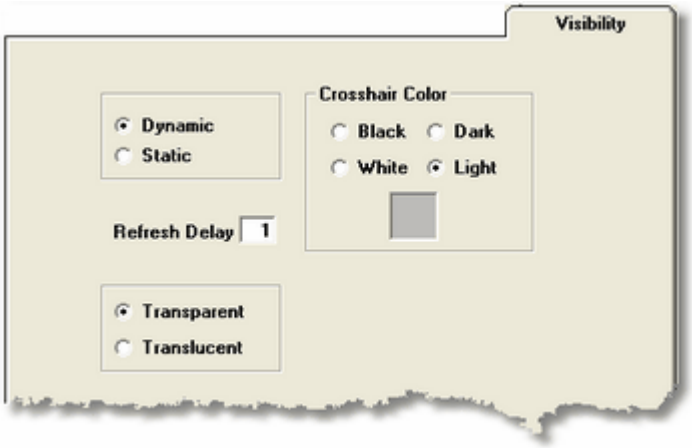
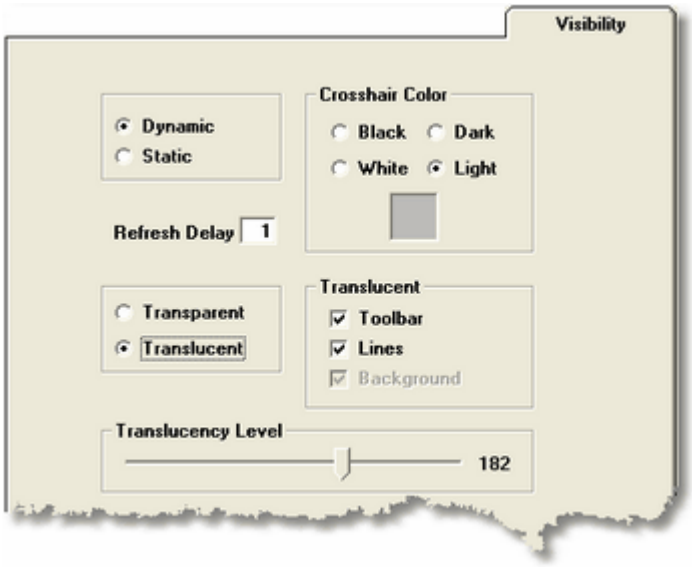
This option also applies to the parallel warning lines of an **Andrews' Pitchfork**.

These options appear here rather than in the **Fibonacci** dialogs because they affect all Fibonacci objects you draw and even affect the way the dialogs and buttons work.

Visibility





These options control the appearance of the overlay window.

The choice between **Dynamic** and **Static** is made automatically when you first use ChartOverlay. **Dynamic** requires a system feature that is only available for Windows® 2000 and Windows® XP. For earlier versions of Windows®, **Static** is the only choice. There are two principal differences between the two modes. The advantage of **Dynamic** mode is that any changes in the background are immediately visible. The disadvantage is that your system must do more work to support it. If you find that you're having performance problems, you might want to switch to **Static** mode. When you run in static mode, certain actions you take will refresh the background automatically (eg, moving or resizing the overlay, erasing an object, or changing to or from logarithmic scaling). Normally, however, you will need to use the **Refresh** button on the Toolbar.

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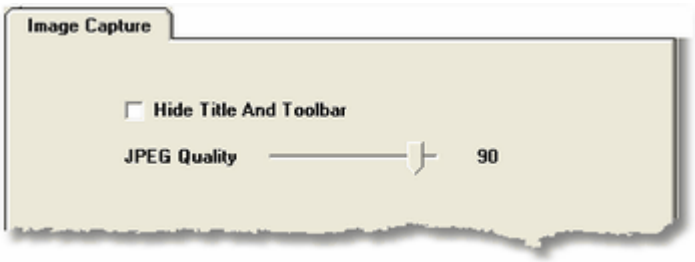
In **Static** mode, a brief delay is required for refreshing the background. If you observe that the background is not being properly refreshed, you may want to increase **Refresh Delay**, which is specified in seconds. This delay value will depend on the speed of your processor.

When you choose **Transparent**, your overlay window will be clear and you will be able to see the background directly. If you prefer **Translucent**, the background of the overlay will be a little cloudy (how much depend on your choice of **Translucency Level**. You will be able to see through the overlay, but the overlay background will also be visible. If you choose this mode, you will be able to specify whether you want a **Translucent Toolbar** or **Translucent Lines**. If you make the Toolbar or the lines translucent, you will be able to see through them but they will be fainter (depending on Translucency Level). In Translucent mode, the background of the overlay window will always be translucent.

You can choose from one of four **Crosshair Colors** (**Black**, **White**, **Dark** and **Light**). Be warned that Black and White do not show up against black and white backgrounds, respectively. **Light** seems to be the most versatile choice. We tried allowing arbitrary crosshair colors, but that interfered with the colors used to draw the objects.

Image Capture



Checking **Hide Title and Toolbar** will leave the Title and Toolbar out of any images that you choose to save (if the toolbar is hidden, it won't appear in the image regardless of this setting). If you choose this option, only the drawing area of the overlay window will be saved.

JPEG Quality applies only when you choose to save images in the **JPEG (JPG)** format. The JPEG format can increase compression by sacrificing a specified amount of quality. **GIF** and **PNG** will give you better compression and do not sacrifice quality. Choose a value between 0 and 100.

Hot Key

The **Hot Key** allows you to hide or show the overlay window with a single keystroke combination. This can be useful if you want to temporarily expose the window behind the

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overlay (see **Always On Top** above). If the overlay is hidden, the Hot Key will make it appear. If the overlay is the active window, the Hot Key will hide it. There is a third state in which the overlay is visible but another window is the one Windows® considers active; in this case, pressing the Hot Key once will make the overlay Active; pressing it again will make Hide the overlay (ie, you may have to press the Hot Key twice to Hide the overlay).

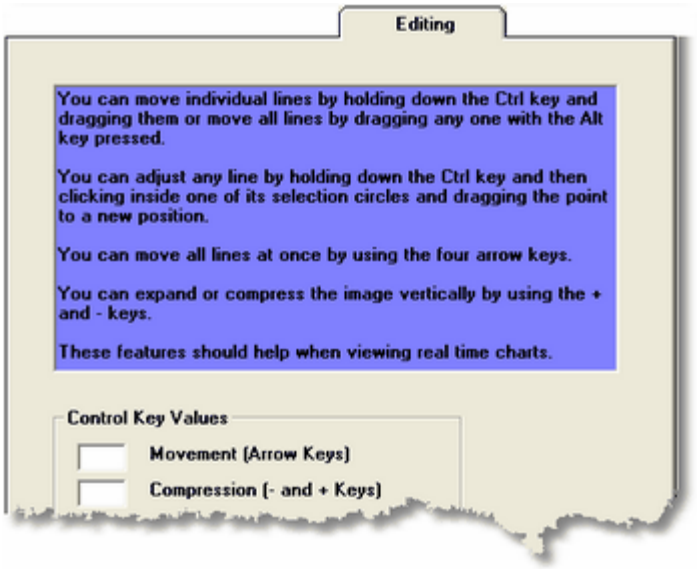
When you start ChartOverlay, you may get a message that says

> **Failed to register Hot Key [Ctrl + Alt + F]. Hot key is already registered. Please modify or delete the value in the Options dialog.**

This is normal. The message is telling you that another application that you use has already declared its intention to use the same Hot Key combination. You can use this part of the Options dialog to choose a new combination that does not conflict. In the worst case, you may have to try more than one new combination.

To change the Hot Key, place your cursor in the Hot Key edit box and press the key combination you want to use. If you use a sequence that has already been claimed by another program, it may be ignored (or the associated action may take place).

Editing


Editing
You can move individual lines by holding down the Ctrl key and dragging them or move all lines by dragging any one with the Alt key pressed.
You can adjust any line by holding down the Ctrl key and then clicking inside one of its selection circles and dragging the point to a new position.
You can move all lines at once by using the four arrow keys.
You can expand or compress the image vertically by using the + and - keys.
These features should help when viewing real time charts.
Control Key Values
Movement (Arrow Keys)
Compression (- and + Keys)

The text with the **blue background** provides a brief summary of some of the editing features of ChartOverlay.

The **Control Key** can be used to modify some of the editing functions. If you are using the arrow keys to move the objects you have drawn (up, down, left or right), **Movement (Arrow Keys)** specifies how many pixels to move them for each keystroke. If you are using the **+** and **-** keys to stretch or shrink the vertical scale of your objects (adjust *both* the top and bottom of each object up or down), **Compression (- and + Keys)** specifies how many pixels to adjust top and bottom for each keystroke. If the ctrl key is *not* pressed, a value of one is used.

Colors

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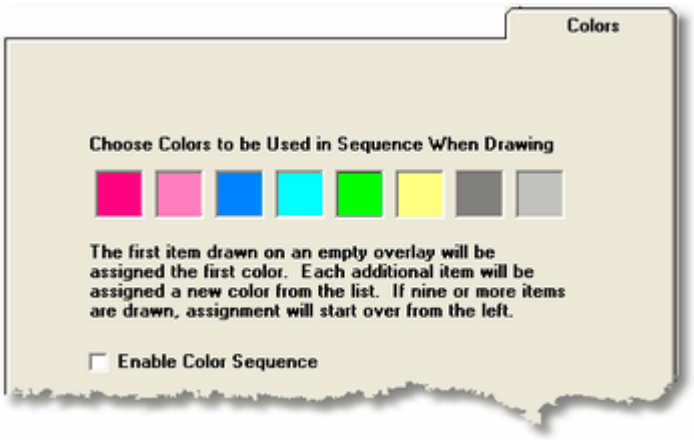
Colors
Choose Colors to be Used in Sequence When Drawing
The first item drawn on an empty overlay will be assigned the first color. Each additional item will be assigned a new color from the list. If nine or more items are drawn, assignment will start over from the left.
Enable Color Sequence

Although ChartOverlay gives you a lot of control over the colors schemes for various objects, this may not be sufficient when you draw several objects of the same type (eg, **Retracements** or **Pitchforks**). In such cases, it may be confusing to have several similarly colored objects overlapping one another.

If you check **Enable Color Sequence**, ChartOverlay will instead select (in order) one of the colors specified on this tab for each object you have added to the overlay. All lines in a single object will have the same color, but different objects will have different colors. Text objects are not affected by this option, nor are Trendlines or Parallel Trendlines unless their **Speed Resistance**, **Gann** or **Action/Reaction** options are selected.

You can change any of the colors in the sequence by clicking on it and selecting a new color from the menu that pops up.

4.11 About

The About dialog provides version information and access to some other features. To open it, either click on the **About** button

in the tool bar or choose **About** from the menu.

Version gives the version number and the date on which the version was created. You can use this to tell whether you have the latest version, and you can provide this information to Omnium Support in the event you require assistance.

Register opens the Registration dialog so you can enter (or check) your Registration Key. This option can also be accessed from the menu.

Check For Updates consults the Omnium Software server and tells you whether a new version of ChartOverlay is available. This option can also be accessed from the menu.

Application Data opens the folder in which your Application Data is kept. In previous

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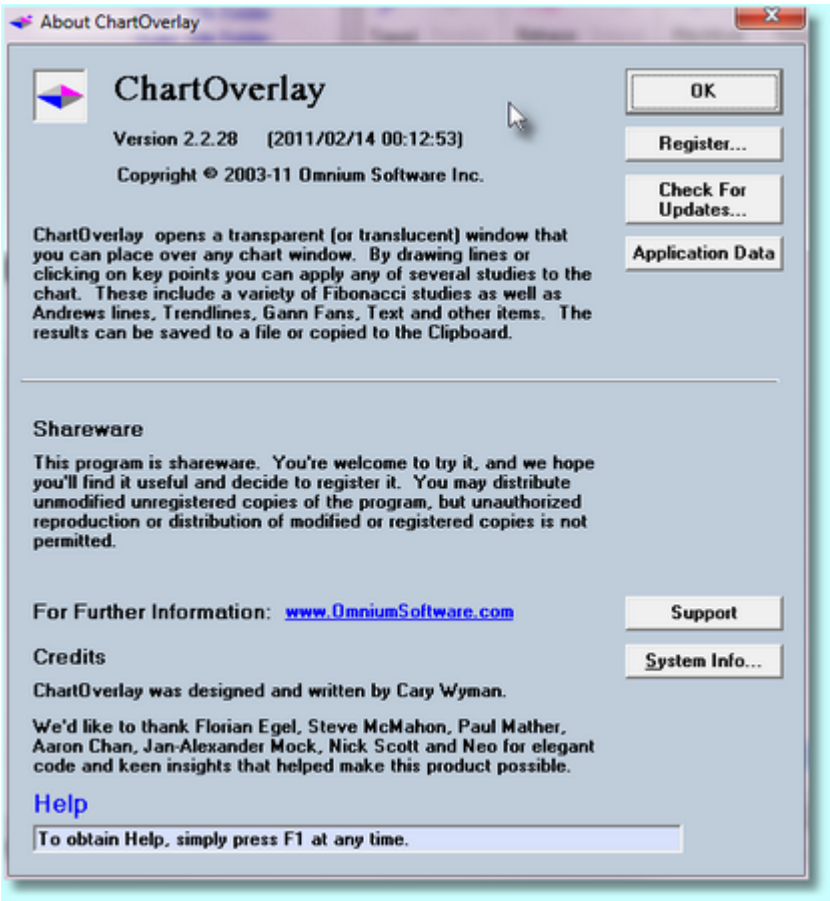
versions of ChartOverlay, and under older versions of Windows®, this information was written to the folder in which ChartOverlay itself was kept. When Vista was released, it forbade the use of that folder for user data and automatically put it in an obscure location with a long pathname. Newer versions of ChartOverlay follow the new Windows® guidelines for storing user data, but that still involves a long and complicated pathname. This button finds the data for you.

Support opens an eMail addressed to Omnium Support in case you need to contact us.

System Info opens a window that displays System Information should you need to review any of that.


About ChartOverlay
ChartOverlay
Version 2.2.28 (2011/02/14 00:12:53)
Copyright © 2003-11 Omnium Software Inc.
ChartOverlay opens a transparent (or translucent) window that you can place over any chart window. By drawing lines or clicking on key points you can apply any of several studies to the chart. These include a variety of Fibonacci studies as well as Andrews lines, Trendlines, Gann Fans, Text and other items. The results can be saved to a file or copied to the Clipboard.
OK
Register...
Check For Updates...
Application Data
Shareware
This program is shareware. You're welcome to try it, and we hope you'll find it useful and decide to register it. You may distribute unmodified unregistered copies of the program, but unauthorized reproduction or distribution of modified or registered copies is not permitted.
For Further Information: www.OmniumSoftware.com
Support
Credits
System Info...
ChartOverlay was designed and written by Cary Wyman.
We'd like to thank Florian Egel, Steve McMahon, Paul Mather, Aaron Chan, Jan-Alexander Mock, Nick Scott and Neo for elegant code and keen insights that helped make this product possible.
Help
To obtain Help, simply press F1 at any time.

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4.12 Registration

When you have only a few days remaining in your Free Trial, or when you choose **Register...** from the Menu, the following dialog will appear.

If you wish to continue with your Free Trial, simply click the **Continue Free Trial** button.

If you have a Registration Key you can enter it in the **Key** box. Actually, **you can copy your name and the key together** and **paste** the copied information into *either* the **Name** box or the **Key** box (**ChartOverlay will separate them for you**). **Copy and Paste** are recommended to avoid errors when typing the long Registration Key string. If you do type in the Registration Key, note that there are no **O**s (letters); only the digits **0-9** and the letters **A-F**.

Registration
Days Left
You have 15 days left before your temporary key expires.
Register
If you have a Registration Key, enter it below
If you copied your Name and your Registration Key together, you can paste them into either box and they will be separated automatically.
Name
Key
Submit Key
Cancel
To obtain a Registration Key, click Buy Now below.
Buy Now or Continue Free Trial
Click Buy Now to obtain a Registration Key, or click Continue Free Trial.
Buy Now
Continue Free Trial

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